

STIC Search Report

STIC Database Tracking Number: 21,0035

TO: Nathan Nutter

Location: Remsen 10b75

Art Unit: 1711

December 12, 2006

Phone: 571-272-1076

Serial Number: 10 / 516698

From: Jan Delaval Location: EIC 1700

Remsen 4a30

Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes		
·		
		·
	·	



SEARCH REQUEST FORM

Scientific and Technical Information Center

		•	
Requester's Full Name: Nat	han Nutter	Examiner # : 610 46 Date: 11	Dec 2006
	Number 30 2 0 76		598 ·
		ilts Format Preferred (circle) PAPER D	ISK E-MAIL
If more than one search is subn		re searches in order of need.	*****
•	• -	as specifically as possible the subject matter to b	
		syms, and registry numbers, and combine with the caning. Give examples or relevant citations, authors.	
known. Please attach a copy of the cover		-	1015, 010, 11
Title of Invention: (Moth)acratic este	ers A polyakoxylated	trimethyd!
Inventors (places provide full names):	De at al	ers of polyakoxylated	propon
Inventors (please provide full names):	POPP ET		
	<u> </u>		•
Earliest Priority Filing Date:	06/11/2007	<u>-</u>	
For Sequence Searches Only Please inclu- appropriate serial number.	de all pertinent information (parent, child, divisional, or issued patent numbers)	along with the
•• •	CLAIMS:		
, —		23. 24. 25. 25. 27.	
	•	usly presented) An ester F o	L
formul	a I		
	,,	Ŷ	
	(EO) n ₃ / (PO) m ₃ /	o (PO) m ₁ (EO) n ₁	
R ₃		R ₂	1
		O (PO) m ₂ (EO) n ₂	
		. "	i .
•		I	
	wherein EO i	s O-CH2-CH2-,	
	PO is indepe	ndently at each instance O-CE	12-
сн (снз) - or O-CH(CH3) -	CH2-,	
•	n1, n2, and	n3 are independently 4, 5, or	: 6,
	n1 + n2 + n3	is 14, 15, or 16,	
	m1, m2, and	m3 are independently 1, 2, or	c 3,
•	m1 + m2 + m3	is 4, 5, or 6, and	
	R1, R2, and	R3 are independently H or CH3	3.
************	******	***********	****
STAFF USE ONLY	Type of Search	Vendors and cost where applicable	;
Searcher:	NA Sequence (#)	STN	
Searcher Phone #: 22504	AA Sequence (#)	· Dialog	
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up: 12/12/06	Bibliographic	Dr. Link	
Date Completed: (2/12/0 6	Litigation	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	Sequence Systems	
Clerical Prep Time: Zo	Patent Family	WWW/Internet	
Online Time:	Other	Other (specify)	

Other (specify)_

PTO-1590 (8-01)

Other

Online Time:

=> fil reg
FILE 'REGISTRY' ENTERED AT 08:52:43 ON 12 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS).

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 DEC 2006 HIGHEST RN 915185-72-7 DICTIONARY FILE UPDATES: 11 DEC 2006 HIGHEST RN 915185-72-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

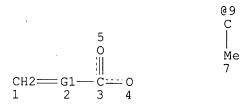
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

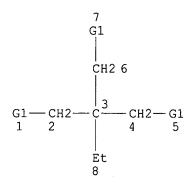
=> d sta que 125 L17 STR



VAR G1=CH/9 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE L21 STR



VAR G1=O/X NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L23 36063 SEA FILE=REGISTRY SSS FUL L21

L25 15641 SEA FILE=REGISTRY SUB=L23 SSS FUL L17

100.0% PROCESSED 17121 ITERATIONS

SEARCH TIME: 00.00.01

15641 ANSWERS

.

=> d his

L2

L3

L4

(FILE 'HOME' ENTERED AT 07:41:06 ON 12 DEC 2006)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:41:25 ON 12 DEC 2006
L1 7 S US20060020078/PN OR (US2004-516698# OR WO2003-EP6054 OR DE200 SEL RN

FILE 'REGISTRY' ENTERED AT 07:43:08 ON 12 DEC 2006
75 S E1-E75
28 S L2 NOT PMS/CI
1 S L3 AND C6H14O3

L9 35 S L7 NOT L8 L10 16 S L9 AND 77-99-6/CRN

L11 16 S L10 AND C2H40 L12 16 S L11 AND C3H60 L13 4 S L12 AND 4/NC

L14 12 S L12 NOT L13 SEL RN 4 9 11 L15 3 S E76-E78

L16 7 S L13,L15 L17 STR

```
L18
            50 S L17
L19
                STR
L20
              0 S L19
L21
                STR L19
L22
             50 S L21
L23
          36063 S L21 FUL
                SAV TEMP L23 NUTTER516/A
             50 S L17 SAM SUB=L23
L24
L25
          15641 S L17 FUL SUB=L23
                SAV TEMP L25 NUTTER516A/A
L26
           497 S L25 AND (75-21-8 OR 25322-68-3)/CRN
L27 '
           2695 S L25 AND C2H40
L28
           2198 S L27 NOT L26
L29
           437 S L25 AND (75-56-9 OR 25322-69-4)/CRN
           1208 S L25 AND C3H60
L30
L31
            771 S L30 NOT L29
L32
            430 S L26-L28 AND L29-L31
            195 S L32 NOT (P OR SI OR N OR S)/ELS
L33
L34
            114 S L33 NOT C6/ES
L35
            107 S L34 NOT L16
L36
            50 S L35 AND (77-99-6 OR 79-41-4)/CRN
L37
             34 S L35 AND 77-99-6/CRN
L38
             28 S L37 AND (79-41-4 OR 79-10-7)/CRN
L39
             24 S L38 NOT (OC4 OR OC4-C6)/ES
                SEL RN 1 2 10-12 14 17 10 22 24
L40
             9 S E79-E87
L41
             15 S L39 AND C6H14O3 NOT L40
                SEL RN 12
L42
             1 S E88
L43
             10 S L37 AND C6H14O3 NOT L39
L44
            16 S L36 NOT L37-L43
L45
            57 S L35 NOT L36-L44
L46
            323 S L32 NOT L35-L45
             51 S L46 NOT (C6 OR OC4 OR OC5 OR OC4-C6 OR C6-C6 OR C5-C5)/ES
L47
L48
             47 S L47 NOT 56-81-5/CRN
L49
             40 S L48 AND (N OR S OR P OR SI)/ELS
L50
             7 S L48 NOT L49
L51
              6 S L50 NOT 28961-43-5/CRN
L52
            410 S L25 AND 107-21-1/CRN
L53
           3059 S L52, L26-L28
L54
            454 S L53 AND L29-L31
L55
             99 S L53 AND 57-55-6/CRN
L56
              0 S L53 AND C3H8O2 NOT L55
L57
            538 S L54, L55
L58
            108 S L57 NOT L32-L51
L59
             22 S L58 AND UNSPECIFIED
L60
             86 S L58 NOT L59
L61
             16 S L60 NOT (C6 OR OC4 OR OC4-C6 OR C6-C6 OR C5-C5)/ES
L62
             6 S L16 NOT 28961-43-5/CRN
L63
             16 S L62, L40, L42, L51
                SAV L63 TEMP NUTTER516B/A
     FILE 'HCAOLD' ENTERED AT 08:47:00 ON 12 DEC 2006
L64
     FILE 'USPATFULL' ENTERED AT 08:47:04 ON 12 DEC 2006
L65
             15 S L63
             11 S L65 AND (PD<=20020611 OR PRD<=20020611 OR AD<=20020611)
L66
     FILE 'USPATFULL' ENTERED AT 08:49:41 ON 12 DEC 2006
```

```
FILE 'HCAPLUS' ENTERED AT 08:49:48 ON 12 DEC 2006
L67
             23 S L63
L68
             22 S L67 AND (PD<=20020611 OR PRD<=20020611 OR AD<=20020611) AND P
L69
              0 S L67 AND PY<=2002 NOT P/DT
L70
              7 S L68 AND BASF?/PA,CS
L71
              4 S L68 AND (POPP ? OR DANIEL ? OR SCHRODER ? OR SCHROEDER ? OR J
L72
             22 S L68-L71
     FILE 'REGISTRY' ENTERED AT 08:52:43 ON 12 DEC 2006
=> d ide can tot 163
L63 ANSWER 1 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
     824950-59-6 REGISTRY
RN
ED
     Entered STN: 03 Feb 2005
CN
     2-Propenoic acid, polymer with methyloxirane diblock polymer with oxirane
     ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)
     tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)
     (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x . 3 C3 H4 O2 . C3 H4 O2 . C3 H4 O2 .
MF
     Na)x
CI
     PMS
PCT
    Polyacrylic, Polyether, Polyether formed, Polyother
SR
LC
     STN Files:
                 CA, CAPLUS .
     CM
          1
    CRN 7446-81-3 (79-10-7)
     CMF C3 H4 O2 . Na
   0
HO-C-CH-CH2
    Na
          2
    CM
    CRN 79-10-7
    CMF C3 H4 O2
HO-C-CH-CH2
    CM
          3
    CRN
         824950-31-4
    CMF
         C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2
          CM
              4
```

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN 697765-47-2 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 7

CRN 75-56-9 CMF C3 H6 O

CH3

CM 8

CRN 75-21-8 CMF C2 H4 O



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:350865

L63 ANSWER 2 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN RN 824950-31-4 REGISTRY

ED Entered STN: 03 Feb 2005 CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, diblock (9CI) (CA INDEX NAME) MF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2 CI COM PCT Polyether, Polyether formed SR CA LC STN Files: CA, CAPLUS CM1 CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

CM 3

CRN 697765-47-2 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O

CH3

CM 5

CRN 75-21-8 CMF C2 H4 O \angle°

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:350865

L63 ANSWER 3 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **774586-49-1** REGISTRY

ED Entered STN: 04 Nov 2004

CN 2-Propenoic acid, sodium salt, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate (9CI) (CA INDEX NAME)

MF (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2 . C3 H4 O2 . Na)x

CI PMS

PCT Polyacrylic, Polyether, Polyether formed, Polyother

SR CA

CM 1

CRN 7446-81-3 (79-10-7) CMF C3 H4 O2 . Na

Na

CM 2

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

CM 4

CRN 77-99-6 CMF C6 H14 O3

CMF

CH3

CM 7

CRN 75-21-8

CMF C2 H4 O

C3 H6 O



```
L63
    ANSWER 4 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
    774577-49-0 REGISTRY
RN
ΕD
    Entered STN: 04 Nov 2004
CN
     2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether
     with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and
     sodium 2-propenoate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
    Acrylic acid-ethylene oxide-propylene oxide copolymer trimethylolpropane
     ether triacrylate-sodium acrylate copolymer
MF
     (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x . 3 C3 H4 O2 . C3 H4 O2 . C3 H4
    02 . Na)x
CI
     PMS
PCT
    Polyacrylic, Polyether, Polyether formed, Polyother
SR
LC
    STN Files:
                  CA, CAPLUS
    CM
          1
    CRN
         7446-81-3 (79-10-7)
    CMF C3 H4 O2 . Na
```

● Na

. CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 117989-76-1 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 7

CRN 75-56-9 CMF C3 H6 O



CM 8

CRN 75-21-8 CMF C2 H4 O



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:350828

L63 ANSWER 5 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **633314-15-5** REGISTRY

ED Entered STN: 02 Jan 2004

CN 2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)

tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

MF (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x . 3 C3 H4 O2 . C3 H4 O2 . C3 H4 O2 . Na) x

CÍ PMS

PCT Polyother

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 7446-81-3 (79-10-7) CMF C3 H4 O2 . Na₅

Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ \mid \\ \text{HO-CH}_2-\text{C-Et} \\ \mid \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 7

CRN 75-56-9 CMF C3 H6 O



CM 8

CRN 75-21-8 CMF C2 H4 O $/^{\circ}$

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:43143

REFERENCE 2: 140:28395

L63 ANSWER 6 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **633314-14-4** REGISTRY

ED Entered STN: 02 Jan 2004

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

MF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x . 3 C3 H4 O2

CI COM

PCT Polyether, Polyether formed

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c|c} & \text{CH}_2-\text{OH} \\ & | \\ \text{HO-CH}_2-\text{C-Et} \\ & | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9

CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:43143

REFERENCE 2: 140:28395

L63 ANSWER 7 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **161278-82-6** REGISTRY

ED Entered STN: 07 Mar 1995

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediyl (3:1), tris(2-methyl-2-propenoate) (9CI)

MF C6 H14 O3 . 3 C4 H6 O2 . 3 (C3 H6 O . C2 H4 O) x

PCT Polyether, Polyether formed

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 79-41-4 CMF C4 H6 O2

CH₂ || Me-C-CO₂H

CM 2

CRN 77-99-6 CMF C6 H14 O3

СНЗ

CM 5

CRN 75-21-8

CMF C2 H4 O

CM

1

.2 REFERENCES IN FILE CAPLUS (1907 TO DATE) REFERENCE 1: 140:102019 REFERENCE 2: 122:147331 L63 ANSWER 8 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN RN **150604-34-5** REGISTRY ED Entered STN: 14 Oct 1993 CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) DR 633314-17-7 MFC6 H14 O3 . 3 C4 H6 O2 . 3 (C3 H6 O . C2 H4 O)x PCT Polyether, Polyether formed SR LC STN Files: CA, CAPLUS, USPATFULL

2 REFERENCES IN FILE CA (1907 TO DATE)

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O

СНЗ

CM 5

CRN 75-21-8 CMF C2 H4 O

 $\stackrel{\circ}{\triangle}$

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:43143

REFERENCE 2: 140:28395

```
REFERENCE
           3: 119:275100
```

CRN

77-99-6 CMF C6 H14 O3

```
L63 ANSWER 9 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     125472-01-7 REGISTRY
ED
     Entered STN: 16 Feb 1990
CN
     2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether
     with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
     (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, polymer with
     2-propenoic acid (9CI)
CN
     Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-
     1,3-propanediol (3:1), tri-2-propenoate, polymer with 2-propenoic acid
MF
     (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x . 3 C3 H4 O2 . C3 H4 O2) x
CI
PCT
     Polyacrylic, Polyether, Polyether formed, Polyother
     Environment Canada (EC)
SR
LC
     STN Files: CHEMLIST
     Other Sources: DSL**
         (**Enter CHEMLIST File for up-to-date regulatory information)
     CM
          1
     CRN 79-10-7
     CMF C3 H4 O2
   0
HO-C-CH=CH_2
     CM
          2
     CRN
         117989-76-1
     CMF
         C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2
          CM
               3
          CRN
              79-10-7
          CMF C3 H4 O2
HO-C-CH=CH2
          CM
```

```
CH2-OH
HO-CH2-C-Et
        сн2-он
          CM
                5
               9003-11-6
          CRN
          CMF
                (C3 H6 O . C2 H4 O) x
          CCI
               PMS
               CM
                     6
               CRN
                    75-56-9
               CMF
                     C3 H6 O
```

CH3

CM 7

CRN 75-21-8

CMF C2 H4 O



```
L63 ANSWER 10 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     118800-30-9 REGISTRY
ΕD
     Entered STN: 03 Feb 1989
CN
     Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
     (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-
     1,3-propanediol (3:1), 2-propenoate (9CI)
OTHER NAMES:
CN
    Ethylene oxide-propylene oxide copolymer ether trimethylolpropane with
     acrylate
CN
     Trimethylolpropane-initiated ethylene oxide-propylene oxide copolymer
     acrylate
DR
     151437-90-0
MF
    C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . x C3 H4 O2
CI
     COM
PCT
    Polyether, Polyether formed
SR
     CAS Client Services
LC
     STN Files:
                 CA, CAPLUS, CHEMLIST, USPATFULL
    CM
          1
```

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O

СНЗ

CM 5

CRN 75-21-8 CMF C2 H4 O

, / \

6 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:171517

REFERENCE 2: 126:344211

REFERENCE 3: 125:302320

```
REFERENCE
            4: 122:92840
REFERENCE
                120:334936
            5:
REFERENCE
            6:
                119:283964
L63 ANSWER 11 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN • 117989-76-1 REGISTRY
ED
     Entered STN: 16 Dec 1988
CN
     Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
     (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI)
                                                                    (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
     Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-
     1,3-propanediol (3:1), tri-2-propenoate (9CI)
ΜF
     C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2
CI
PCT
    Polyether, Polyether formed
SR
LC
     STN Files:
                 CA, CAPLUS, USPATFULL
     CM
          1
     CRN
         79-10-7
     CMF C3 H4 O2
   0
HO-C-CH=CH2
          2
     CM
         77-99-6
     CRN
     CMF C6 H14 O3
        CH2-OH
HO-CH2-C-Et
        CH2-OH
     CM
          3
    CRN
          9003-11-6
     CMF
          (C3 H6 O . C2 H4 O) x
     CCI
         PMS
          CM
               4
          CRN
              75-56-9
          CMF
              C3 H6 O
```

```
СНЗ
```

CRN 75-21-8 CMF C2 H4 O

 $\stackrel{\circ}{\triangle}$

```
10 REFERENCES IN FILE CA (1907 TO DATE)
```

- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:350828

REFERENCE 2: 140:102019

REFERENCE 3: 133:65978

REFERENCE 4: 132:152313

REFERENCE 5: 131:37785

REFERENCE 6: 127:97521

REFERENCE 7: 122:147331

REFERENCE 8: 119:51269

REFERENCE 9: 119:10401

REFERENCE 10: 110:9783

L63 ANSWER 12 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN 117801-95-3 REGISTRY

ED Entered STN: 02 Dec 1988

CN 2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) 2-propenoate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate, block, polymer with 2-propenoic acid (9CI)

CN Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate, block, polymer with 2-propenoic acid (9CI)

MF (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . x C3 H4 O2 . C3 H4 O2)x

CI PMS

PCT Polyacrylic, Polyether, Polyether formed, Polyother

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 4

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ \mid \\ \text{HO-CH}_2-\text{C-Et} \\ \mid \\ \text{CH}_2-\text{OH} \end{array}$$

CM 5

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CM 6

CRN 75-56-9 CMF C3 H6 O

CH3

CRN 75-21-8 CMF C2 H4 O



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:10884

L63 ANSWER 13 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **117742-99-1** REGISTRY

ED Entered STN: 02 Dec 1988

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate, block (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate, block (9CI)

MF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . x C3 H4 O2

CI COM

PCT Polyether, Polyether formed

SR CA

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$CH_2-OH$$

 $HO-CH_2-C-Et$
 CH_2-OH

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CRN 75-56-9 CMF C3 H6 O



CM5

CRN 75-21-8 CMF C2 H4 O



CRN

77-99-6 CMF C6 H14 O3

```
L63 ANSWER 14 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     115165-81-6 REGISTRY
ED
     Entered STN: 09 Jul 1988
CN
     Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
     (hydroxymethyl)-1,3-propanediol (3:1), 2-methyl-2-propenoate, block (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-
     1,3-propanediol (3:1), 2-methyl-2-propenoate, block (9CI)
     C6 H14 O3 . x C4 H6 O2 . 3 (C3 H6 O . C2 H4 O) x
MF
PCT
     Polyether, Polyether formed
SR
     CA
LC
     STN Files:
                  CA, CAPLUS, USPATFULL
     CM
          1
     CRN 79-41-4
     CMF C4 H6 O2
   CH<sub>2</sub>
Me-C-CO_2H
          2
     CM
```

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



2 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:283964

REFERENCE 2: 110:10884

L63 ANSWER 15 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **67184-01-4** REGISTRY

ED Entered STN: 16 Nov 1984

CN 2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-

(hydroxymethyl)-1,3-propanediol (3:1), polymer with 2-propenoic acid (9CI)

CN Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), polymer with 2-propenoic acid (9CI) OTHER NAMES:

CN Acrylic acid-polyethylene-polypropylene glycol trimethylolpropane ether (3:1) copolymer

MF (C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . C3 H4 O2)x

```
CI
     PMS
PCT Polyacrylic, Polyether, Polyether formed, Polyother
    STN Files: CA, CAPLUS, USPATFULL
          1
     CM
    CRN 79-10-7
    CMF C3 H4 O2
   0
HO-C-CH=CH_2
          2
    CM
    CRN
         52624<del>-</del>57-4
     CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x
          CM
               3
          CRN
              77-99-6
          CMF C6 H14 O3
```

CM 4

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 5

CRN 75-56-9

CMF C3 H6 O



CM 6

CRN 75-21-8

CMF C2 H4 0

 \angle

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:7044

REFERENCE 2: 89:111127

L63 ANSWER 16 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN **67183-99-7** REGISTRY

ED Entered STN: 16 Nov 1984

CN 2-Propenoic acid, 2-methyl-, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) and 2-propenoic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) and 2-methyl-2-propenoic acid (9CI)

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), polymer with 2-methyl-2-propenoic acid and 2-propenoic acid (9CI)

CN Oxirane, polymer with methyloxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), polymer with 2-methyl-2-propenoic acid and 2-propenoic acid (9CI)

MF (C6 H14 O3 . C4 H6 O2 . 3 (C3 H6 O . C2 H4 O)x . C3 H4 O2)x

CI PMS

PCT Polyacrylic, Polyether, Polyether formed, Polyother

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 52624-57-4

CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

CM 4

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 5

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 6

CRN 75-56-9 CMF C3 H6 O



CM 7

CRN 75-21-8 CMF C2 H4 O

 $\overset{\circ}{\triangle}$

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:7044

REFERENCE 2: 89:111127

=> fil uspatful FILE 'USPATFULL' ENTERED AT 08:53:04 ON 12 DEC 2006 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 12 Dec 2006 (20061212/PD) FILE LAST UPDATED: 12 Dec 2006 (20061212/ED) HIGHEST GRANTED PATENT NUMBER: US7150045 HIGHEST APPLICATION PUBLICATION NUMBER: US2006277640

CA INDEXING IS CURRENT THROUGH 12 Dec 2006 (20061212/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 12 Dec 2006 (20061212/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

=> d 166 bib abs hitstr tot ANSWER 1 OF 11 USPATFULL on STN ΑN 2006:22244 USPATFULL TΤ (Meth) acrylic esters of polyalkoxylated trimethylolpropane IN Popp, Andreas, Birkenheide, GERMANY, FEDERAL REPUBLIC OF Daniel, Thomas, Waldsee, GERMANY, FEDERAL REPUBLIC OF Schroder, Jurgen, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF Jaworek, Thomas, Kallstadt, GERMANY, FEDERAL REPUBLIC OF Funk, Rudiger, Niedernhausen, GERMANY, FEDERAL REPUBLIC OF Schwalm, Reinhold, Wachenheim, GERMANY, FEDERAL REPUBLIC OF Wesimantel, Matthias, Jossgrund-Oberndorf, GERMANY, FEDERAL REPUBLIC OF Riegel, Ulrich, Frankfurt, GERMANY, FEDERAL REPUBLIC OF PΙ US 2006020078 A1 20060126 ΑI US 2003-516698 A1 20030610 (10) WO 2003-EP6054 20030610 20041201 PCT 371 date PRAI DE 2002-10225943 20020611 <--DE 2003-10315336 20030403 DΤ Utility FS APPLICATION LREP MARSHALL, GERSTEIN & BORUN LLP, 233 S. WACKER DRIVE, SUITE 6300, SEARS TOWER, CHICAGO, IL, 60606, US CLMN Number of Claims: 30 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 2050 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB The present invention relates to novel (meth)acrylic esters of polyalkoxylated trimethylolpropane of the formula ##STR1## where EO is O--CH2-CH2- PO is independently at each instance O--CH2-CH(CH3)- or O--CH(CH3)-CH2- n1, n2 and n3 are independently 4, 5 or 6, n1+n2+n3 is 14, 15 or 16, m1, m2 and m3 are independently 1, 2 or 3, m1+m2+m3 is 4, 5 or 6, R1, R2 and R3 are independently H or CH3, a simplified process for preparing these esters and the use of reaction mixtures thus obtainable. CAS INDEXING IS AVAILABLE FOR THIS PATENT. 150604-34-5P (acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels) RN 150604-34-5 USPATFULL CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME) 1 CM

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CDES 8:PM, BLOCK

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



IT 633314-15-5P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-15-5 USPATFULL

CN 2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM '1

CRN 7446-81-3 CMF C3 H4 O2 . Na

● Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2 CDES 8:GD, ESTER, ETHER

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$CH_2-OH$$
 $HO-CH_2-C-Et$
 CH_2-OH

CM 6

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O) xCCI PMS CDES 8:PM, BLOCK 7 .

CM

CRN 75-56-9 CMF C3 H6 O

СНЗ

CM 8

CRN 75-21-8 CMF C2 H4 O



ΙT 633314-14-4P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-14-4 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

CM1

CRN 79-10-7 CMF C3 H4 O2

2 CM

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3 CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O) xCCI **PMS** CDES 8:PM, BLOCK 4 CMCRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L66

ANSWER 2 OF 11 USPATFULL on STN AN 2005:248552 USPATFULL ΤI (Meth)acrylic esters of polyalkoxylated trimethylolpropane IN Popp, Andreas, Birkenheide, GERMANY, FEDERAL REPUBLIC OF Daniel, Thomas, Waldsee, GERMANY, FEDERAL REPUBLIC OF Schroder, Jurgen, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF Jaworek, Thomas, Kallstadt, GERMANY, FEDERAL REPUBLIC OF Funk, Rudiger, Niedernhausen, GERMANY, FEDERAL REPUBLIC OF Schwalm, Reinhold, Wachenheim, GERMANY, FEDERAL REPUBLIC OF Weismantel, Matthias, Jossgrund-Oberndorf, GERMANY, FEDERAL REPUBLIC OF Riegel, Ulrich, Frankfurt, GERMANY, FEDERAL REPUBLIC OF PΑ BASF AKTIENGESELLSCHAFT a German Corporation, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF, D-67056 (non-U.S. corporation) PΙ US 2005215752 A1 20050929 AΙ US 2003-517042 A1 · 20030606 (10) WO 2003-EP5953 20030606 20041203 PCT 371 date PRAI DE 2002-10225943 20020611 DE 2003-10315345 20030403 DE 2003-10315669 20030404 DT Utility FS APPLICATION LREP MARSHALL, GERSTEIN & BORUN LLP, 233 S. WACKER DRIVE, SUITE 6300, SEARS TOWER, CHICAGO, IL, 60606, US CLMN Number of Claims: 35 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 2223 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel (meth)acrylic esters of polyalkoxylated trimethylolpropane of the formula ##STR1## where AO is for each AO independently at each instance EO, PO or BO where EO is O--CH2-CH2- PO is independently at each instance O--CH2-CH(CH3) - or O--CH(CH3)-CH2- BO is independently at each instance O--CH2-CH(CH2-CH3)- or O--CH(CH2-CH3)-CH2- p1+p2+p3 is 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74 or 75, R1, R2 and R3 are independently H or CH3, a simplified process for preparing these esters and the use of reaction mixtures thus obtainable.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 150604-34-5P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 150604-34-5 USPATFULL

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C--} \text{CO}_2 \text{H} \end{array}$$

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CDES 8:PM, BLOCK

CM 4

CRN 75-56-9 CMF C3 H6 O CH3

CM 5

CRN 75-21-8 CMF C2 H4 O

 $\stackrel{\circ}{\triangle}$

IT 633314-15-5P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-15-5 USPATFULL

CN 2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3 CMF C3 H4 O2 . Na

Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

О || НО- С- СН == СН₂

CM 3

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2 CDES 8:GD, ESTER, ETHER

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O)x CCI PMS CDES 8:PM, BLOCK

CM 7

CRN 75-56-9 CMF C3 H6 O

CH3

CM 8

CRN 75-21-8 CMF C2 H4 O



IT 633314-14-4P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-14-4 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c|c} & \text{CH}_2-\text{OH} \\ \vdots \\ \text{HO-CH}_2-\text{C-Et} \\ \vdots \\ \text{CH}_2-\text{OH} \end{array}$$

3 CM

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CDES 8:PM, BLOCK

CM4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L66 ANSWER 3 OF 11 USPATFULL on STN ΑN

2005:203484 USPATFULL

ΤI Method for the production of esters of polyalcohols

```
ΙN
       Jaworek, Thomas, Kallstadt, GERMANY, FEDERAL REPUBLIC OF
       Daniel, Thomas, Waldsee, GERMANY, FEDERAL REPUBLIC OF
       Wolf, Lothar, Torno, GERMANY, FEDERAL REPUBLIC OF
       Koniger, Rainer, Mannheim, GERMANY, FEDERAL REPUBLIC OF
       Schwalm, Reinhold, Wachenheim, GERMANY, FEDERAL REPUBLIC OF
       Hartmann, Gabriele, Hockenheim, GERMANY, FEDERAL REPUBLIC OF
       Wickel, Stefan, Bissersheim, GERMANY, FEDERAL REPUBLIC OF
PΑ
       BASF Aktiengesellschaft, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF,
       67056 (non-U.S. corporation)
ΡI
       US 2005176910
                           A1 20050811
ΑI
       US 2003-514569
                           A1 20030606 (10)
       WO 2003-EP5940
                               20030606
PRAI
       DE 2002-10225943
                           20020611
DT
       Utility
FS
       APPLICATION
LREP
       OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,
       ALEXANDRIA, VA, 22314, US
CLMN
       Number of Claims: 29
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 2418
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Unsaturated acids are esterified with polyalcohols. The resulting
       reaction mixtures have utility.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   150604-34-5P
        (acrylic esters of alkoxylated trimethylolpropane useful in production of
        hydrogels)
RN
     150604-34-5 USPATFULL
CN
     Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
       (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate),
       block (9CI) (CA INDEX NAME)
     CM
          1
     CRN 79-41-4
     CMF C4 H6 O2
   CH2
Me-C-CO2H
          2
     CM
    CRN
         77-99-6
     CMF C6 H14 O3
```

CH2-OH

 $CH_2 - OH$

HO-CH2-C-Et

CRN 106392-12-5
CMF (C3 H6 O . C2 H4 O) x
CCI PMS
CDES 8: PM, BLOCK

CM 4

CRN 75-56-9
CMF C3 H6 O

СНЗ

CM

3

CM 5

CRN 75-21-8 CMF C2 H4 O



IT 633314-15-5P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-15-5 USPATFULL

CN 2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3 CMF C3 H4 O2 . Na

0 || HO- C- CH== CH₂

Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2 CDES 8:GD, ESTER, ETHER

CM 4

CRN 79-10-7 CMF C3 H4 O2 .

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CDES 8:PM, BLOCK

CM 7

CRN 75-56-9 CMF C3 H6 O



CRN 75-21-8 CMF C2 H4 O



IT 633314-14-4P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-14-4 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CDES 8:PM, BLOCK

CM 4

CRN 75-56-9 CMF C3 H6 O



CRN 75-21-8 CMF C2 H4 O



CH₂

 $Me-C-CO_2H$

```
ANSWER 4 OF 11 USPATFULL on STN
L66
ΑN
       2005:190290 USPATFULL
TI
       (Meth)acrylic esters of polyalkoxylated glycerine
IN
       Popp, Andreas A, Birkenheide, GERMANY, FEDERAL REPUBLIC OF
       Daniel, Thomas, Waldsee, GERMANY, FEDERAL REPUBLIC OF
       Schroder, Jurgen, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF
       Kaworek, Thomas, Kallstadt, GERMANY, FEDERAL REPUBLIC OF
       Funk, Rudiger, Niedernhausen, GERMANY, FEDERAL REPUBLIC OF
       Schwalm, Reinhold, Wachenheim, GERMANY, FEDERAL REPUBLIC OF
       Weismantel, Matthias, Jossgrund-Oberndorf, GERMANY, FEDERAL REPUBLIC OF
       Riegel, Ulrich, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
PΙ
       US 2005165208
                           A1 20050728
ΑI
       US 2003-516702
                           A1 20030610 (10)
       WO 2003-EP6028
                               20030610
PRAI
       DE 2002-10225943
                           20020611
                                                                     <--
       DE 2003-10319462
                           20030429
DT
       Utility
FS
       APPLICATION
LREP
      MARSHALL, GERSTEIN & BORUN LLP, 233 S. WACKER DRIVE, SUITE 6300, SEARS
       TOWER, CHICAGO, IL, 60606, US
CLMN
       Number of Claims: 34
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 2151
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The present invention relates to novel (meth)acrylic esters of
       polyalkoxylated glycerol, a simplified process for preparing these
       esters and the use of reaction mixtures thus obtainable.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   150604-34-5P
        (acrylic esters of alkoxylated trimethylolpropane useful in production of
        hydrogels)
RN
     150604-34-5 USPATFULL
CN
    Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
       (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate),
       block (9CI) (CA INDEX NAME)
    CM
          1
    CRN
         79-41-4
    CMF
         C4 H6 O2
```

CM 2

CRN 77-99-6

CMF C6 H14 O3

$$\begin{array}{c} & \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CDES 8:PM, BLOCK

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



CN

IT 633314-15-5P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels) $\frac{1}{2}$

RN 633314-15-5 USPATFULL

2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3 CMF C3 H4 O2 . Na

● Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 633314-14-4

CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2 CDES 8:GD, ESTER, ETHER

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

CM 6

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CDES 8: PM, BLOCK

CM 7

CRN 75-56-9 CMF C3 H6 O

CH3

CM 8

CRN 75-21-8 CMF C2 H4 O

0

IT 633314-14-4P

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-14-4 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

O || HO-C-CH=CH2

CM 2

CRN 77-99-6 CMF C6 H14 O3

 $\begin{array}{c} & \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O) x CCI PMS CDES 8:PM, BLOCK CM 4 CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



```
ANSWER 5 OF 11 USPATFULL on STN
L66
       1998:119210 USPATFULL
AN
TI
       Continuous process for the preparation of highly stable, finely divided,
       low viscosity polymer polyols of small average particle size
IN
       Kratz, Mark R., Krefeld, Germany, Federal Republic of
       Dietrich, Manfred, Leverkusen, Germany, Federal Republic of
       Heinemann, Torsten, Koln, Germany, Federal Republic of
       Jacobs, Gundolf, Rosrath, Germany, Federal Republic of
       Sanders, Josef, Leverkusen, Germany, Federal Republic of
       Woynar, Helmut, Dormagen, Germany, Federal Republic of
PA
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
       (non-U.S. corporation)
PΤ
       US 5814699
                               19980929
                                                                     <--
ΑI
       US 1996-723659
                               19961003 (8)
                                                                     <--
       EP 95115940
PRAI
                           19951010
                                                                     <--
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Zemel, Irina S.
LREP
       Gil, Joseph C., Brown, N. Denise
CLMN
       Number of Claims: 17
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1275
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A continuous process for the preparation of highly stable, finely
AB
       divided, low viscosity polymer polyols of small average particle size
       wherein in the first step an intermediate is prepared by reacting (1) a
       mixture of at least two ethylenically unsaturated monomers, preferably
       styrene and acrylonitrile, in a mixture comprising (2) a base polyol and
       (3) a macromer in the presence of (4) a free radical initiator, (5) a
       solvent having moderate chain transfer activity, and, optionally, (6) a
```

reaction moderator at a temperature of at least 100° C., such

that the intermediate contains at least about 12% by weight of macromer, based on the weight of the base polyol and macromer, and a solids content of at least about 15% by weight and less than about 30% by weight, based on the weight of the base polyol, macromer and ethylenically unsaturated monomers. The intermediate, which functions as a seed for further polymerization, is then further reacted, in one or more stirred-tank reactors in series, in a mixture of at least two ethylenically unsaturated monomers, preferably styrene and acrylonitrile, in a base polyol and, optionally, a macromer, in the presence of solvent, initiator and a reaction moderator which are distributed among the remaining reactors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 118800-30-9P

(macromer; continuous manufacture of highly stable, finely divided, low viscosity polymer polyols of small average particle size from macromers for polyurethane foams)

RN 118800-30-9 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O CH3

CM 5

CRN 75-21-8 CMF C2 H4 O



```
L66 ANSWER 6 OF 11 USPATFULL on STN
ΑN
       1998:75318 USPATFULL
TΙ
       Non-aqueous electrolyte secondary battery
IN
       Matsui, Tooru, Fujiidera, Japan
       Takeyama, Kenichi, Osaka, Japan
PΑ
       Matsushita Electric Industrial Co., Ltd., Osaka-fu, Japan (non-U.S.
       corporation)
PΙ
       US 5773166
                               19980630
                                                                     <--
ΑI
       US 1996-756778
                               19961126 (8)
                                                                     <--
PRAI
       JP 1995-309381
                           19951128
                                                                     <--
DТ
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Bell, Bruce F.
LREP
       Panitch Schwarze Jacobs & Nadel, P.C.
CLMN
       Number of Claims: 3
ECL
       Exemplary Claim: 1
DRWN
       3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 404
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A non-aqueous electrolyte secondary battery employs a negative electrode
       which contains an alkali metal as an active material, and is provided
       with a polymer film thereon, the polymer film being provided with a gel
       electrolyte thereon. The polymer film is made of a polymeric monomer
       which has [molecular weight/terminal polymer functional group number] of
       500 or less, and a structure represented by one of the formulas (1)-(4):
       ##STR1## wherein EO refers to CH.sub.2 CH.sub.2 O, PO refers to CH.sub.2
       (CH.sub.3) CHO, (EO.sub.m PO.sub.n) indicates one of random
       polymerization and block polymerization, and wherein m and n do not
       represent 0 at the same time where 0 \le m and 0 \le n.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 117989-76-1
        (flat non-aqueous electrolyte secondary alkali metal battery with polymer
        coated anode)
RN
     117989-76-1 USPATFULL
CN
    Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
       (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX
       NAME)
    CM
          1
    CRN 79-10-7
    CMF C3 H4 O2
```

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN '75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



ΙN

L66 ANSWER 7 OF 11 USPATFULL on STN

AN 96:82734 USPATFULL

TI Low viscosity polymer polyols a process for their production as well as the manufacture of polyurethane from materials

Sanders, Josef, Leverkusen, Germany, Federal Republic of Kratz, Mark, Krefeld, Germany, Federal Republic of Dietrich, Manfred, Leverkusen, Germany, Federal Republic of Heinemann, Torsten, K oln, Germany, Federal Republic of Woynar, Helmut, Dormagen, Germany, Federal Republic of Jacobs, Gundolf, R osrath, Germany, Federal Republic of

Scholz, Uwe, K oln, Germany, Federal Republic of

PA Bayer Adtiengesellschaft, Leverkusen, Germany, Federal Republic of

(non-U.S. corporation)

US 5554662 19960910 <--

AI US 1995-470695 19950606 (8) <-PRAI DE 1995-19508578 19950310 <--

DT Utility FS Granted

EXNAM Primary Examiner: Foelak, Morton LREP Gil, Joseph C., Brown, N. Denise

CLMN Number of Claims: 15
ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 852

PΙ

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the production of stable, agglomerate-free, low viscosity graft copolymer dispersions through radical polymerization of ethylenically unsaturated monomers in the presence of a base polyol, a macromer, an enol ether of a specific formula, and optionally, an organic solvent. These enol ethers correspond to the general formula:

A=CH--O--R

wherein:

A represents a di-valent residue of the formula ##STR1## R represents an aliphatic hydrocarbon radical having 1 to 18 carbon atoms, a cycloaliphatic hydrocarbon radical having 5 to 10 carbon atoms, or a substituted or unsubstituted benzyl radical;

and

 $\ensuremath{\mathtt{R}^{\,\prime}}$ represents a hydrogen atom or an aliphatic hydrocarbon radical having 1 to 8 carbon atoms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 118800-30-9P

(low viscosity polymer polyols, a process for their production, and $\ensuremath{\mathsf{manufacture}}$

of polyurethane from materials)

RN 118800-30-9 USPATFULL

CM 1

CRN 79-10-7 CMF C3 H4 O2

O || HO-C-CH== CH2

CRN 77-99-6 CMF C6 H14 O3 .

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O

```
ANSWER 8 OF 11 USPATFULL on STN
L66
ΑN
       95:67083 USPATFULL
ΤI
       Galvanic cell
ΙN
       Kono, Michiyuki, Neyagawa, Japan
       Mori, Shigeo, Kyoto, Japan
       Takeda, Kazunari, Takatsuki, Japan
       Izuti, Shyuiti, Shiga, Japan
PΑ
       Dai-Ichi Kogyo Seigaku Co., Ltd., Kyoto, Japan (non-U.S. corporation)
ΡI
                                19950725
       US 5436090
                                                                      <--
       WO 9314529 19930722
                                                                      <--
                                19930921 (8)
ΑI
       US 1993-119214
                                                                      <--
       WO 1993-JP64
                                19930120
                                                                      <--
                                          PCT 371 date
                                19930921
                                19930921
                                         PCT 102(e) date
PRAI
       JP 1992-31451
                           19920121
                                                                      <--
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Skapars, Anthony
LREP
       Morgan & Finnegan
```

CLMN Number of Claims: 11 ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 861

AΒ

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A cell is obtained with use of a solid electrolyte prepared by dissolving a trifunctional terminal acryloyl-modified alkylene oxide polymer having a polymer chain represented by the following formula (1) and an electrolyte salt in a solvent, and then by crosslinking it by a radioactive ray irradiation and/or by heating. The solvent is used in a ratio of 220 to 950 weight % based on the above polymer. ##STR1## (R' is an alkyl group having 1 to 6 carbon atoms, R" is hydrogen or methyl group, and m and n are respectively 0 or an integer of at least 1 and $m+n\geq 35$.)

In a typical galvanic cell, a solid electrolyte combined with a positive electrode active material, which is obtained by mixing said trifunctional terminal acryloyl-modified alkylene oxide polymer with the electrolyte salt, the solvent and the positive electrode active material and crosslinking it by radioactive ray irradiation and/or heating, is used as a composite positive electrode and, between the positive electrode and a negative electrode, an electrode prepared by crosslinking a mixture of said trifunctional terminal acryloyl-modified alkylene oxide polymer, the electrolyte salt, the solvent and the positive electrode active material by radioactive ray irradiation and/or by heating is placed as a separator.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 150604-34-5

(crosslinked, electrolyte containing lithium salts and solvents and, for batteries)

RN 150604-34-5 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$CH_2-OH$$
 $|$
 $HO-CH_2-C-Et$
 $|$
 CH_2-OH

```
CRN 106392-12-5
CMF (C3 H6 O . C2 H4 O) x
CCI PMS
CDES 8:PM, BLOCK

CM 4

CRN 75-56-9
CMF C3 H6 O
```



3

CM 5

CRN 75-21-8 CMF C2 H4 O



```
L66
    ANSWER 9 OF 11 USPATFULL on STN
AN
       94:90914 USPATFULL
TI
       Crosslinking curable resin composition
ΙN
       Kushi, Kenji, Otake, Japan
       Inukai, Ken-ichi, Otake, Japan
       Iseki, Takayuki, Otake, Japan
       Koyanagi, Seiya, Otake, Japan
       Mitsubishi Rayon Co., Ltd., Tokyo, Japan (non-U.S. corporation)
PΑ
PΙ
       US 5356754
                               19941018
                                                                     <--
AΙ
       US 1992-950500
                               19920925 (7)
                                                                     <--
DT
       Utility
FS
       Granted
EXNAM
      Primary Examiner: Brammer, Jack P.
LREP
       Oblon, Spivak, McClelland, Maier & Neustadt
CLMN
       Number of Claims: 5
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A photopolymerizable or radiation polymerizable alkaline developing
       crosslinking curable resin composition possessing superior antiplating
       properties and a short stripping period, in which the stripped plate is
       not easily dissolved in the stripping fluid, and which is comprising:
```

(a) 5-30 parts by weight of at least one compound possessing in one molecule on the average 1.5 or more (meth)acryloyloxy groups, which is obtained by reacting (meth)acrylic acid with a reaction product formed by adding; to a polyatomic alcohol possessing 3 or more OH groups in one

molecule, an alkylene oxide containing propylene oxide in an amount of 67% molar or greater in an amount of 5-12 moles per mole of OH group in the aforementioned polyatomic alcohol,

- (b) 5-30 parts by weight of at least one crosslinkable monomer other than that stated above in (a) , possessing in one molecule 2 or more ethylenically unsaturated groups,
- (c) 45-75 parts by weight of a thermoplastic polymer for use as a binder, the thermoplastic polymer in turn being formed of 15-35 wt % of at least one $\alpha,\ \beta$ -unsaturated carboxyl group containing a monomer having 3-15 carbon atoms, and 65-85 wt % of another copolymerizable monomer, and
- (d) 0-10 parts by weight of a photopolymerization initiator.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 118800-30-9P

(crosslinking curable resin composition)

RN 118800-30-9 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O

```
CH3
```

CRN 75-21-8 CMF C2 H4 O



```
1.66
    ANSWER 10 OF 11 USPATFULL on STN
AN
       94:90717 USPATFULL
TΙ
       Solid electrolyte
IN
       Kono, Michiyuki, Neyagawa, Japan
       Motogami, Kenji, Takatsuki, Japan
       Mori, Shigeo, Kyoto, Japan
PA
       Dai-Ichi Kogyo Seiyaku Co., Ltd., Kyoto, Japan (non-U.S. corporation)
PΤ
       US 5356553
                               19941018
ΑI
       US 1992-957258
                               19921006 (7)
                                                                     <--
PRAI
       JP 1991-3296173
                           19911015
                                                                     <--
DT
       Utility
FS
       Granted
EXNAM
      Primary Examiner: Willis, Jr., Prince; Assistant Examiner: Diamond, Alan
LREP
       Morgan & Finnegan
CLMN
       Number of Claims: 3
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 483
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A solid electrolyte is prepared by dissolving a solvent and an
       electrolyte salt in a trifunctional polymer and crosslinking it by an
       irradiation of an active radiation and/or heating, characterized by that
       said trifunctional polymer is a trifunctional terminal acryloyl-modified
       alkylene oxide polymer containing a polymer chain expressed by the
       following general formula (I) as each functional chain; ##STR1## in
      which R' is a lower alkyl group, R" is hydrogen or methyl group and m or
       n is 0 or an integer of at least 1 and m+n\geq 35, and the amount of
       said solvent is 220 to 950 weight % based on said trifunctional terminal
       acryloyl-modified alkylene oxide polymer.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 115165-81-6P 118800-30-9P
        (preparation of, for electrolytes)
RN
     115165-81-6 USPATFULL
CN
    Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
       (hydroxymethyl)-1,3-propanediol (3:1), 2-methyl-2-propenoate, block
       (9CI) (CA INDEX NAME)
```

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CDES 8:PM, BLOCK

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



RN 118800-30-9 USPATFULL

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O

СНЗ

CM 5

CRN 75-21-8 CMF C2 H4 O

$^{\circ}$

L66 ANSWER 11 OF 11 USPATFULL on STN

AN 80:28122 USPATFULL

TI Stable suspensions of inorganic fillers in organic polyhydroxyl

IN von Bonin, Wulf, Leverkusen, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

```
PΙ
       US 4207227
                                19800610
ΑI
       US 1977-856075
                                19771130 (5)
                                                                      <--
PRAI
       DE 1976-2654746
                            19761203
                                                                      <--
       DE 1977-2714291
                            19770331
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Griffin, Ronald W.
LREP
       Harsh, Gene, Gil, Joseph C., Olson, R. Brent
CLMN
       Number of Claims: 23
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 947
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The instant invention relates to a process for the preparation of stable
       suspensions of inorganic fillers in polyhydroxyl compounds, which are
       suitable for the preparation of polyurethanes, to the suspensions
       obtainable by this process and to their use for the preparation of
       polyurethanes. The suspensions are produced by grafting an olefinically
       unsaturated carboxylic acid (and optionally other olefinically
       unsaturated monomers) onto polyols. The presence of from 0.005 to 15% by
       weight of carboxyl groups in the polyol allows for the production of
       stable dispersion of inorganic fillers in polyols.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   67183-99-7 67184-01-4
        (graft, for stabilization of polyol-filler suspensions for polyurethane.
        manufacture)
RN
     67183-99-7 USPATFULL
     2-Propenoic acid, 2-methyl-, polymer with methyloxirane polymer with
CN
       oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) and
       2-propenoic acid (9CI) (CA INDEX NAME).
     CM
          1
     CRN
         79-41-4
     CMF C4 H6 O2
   CH<sub>2</sub>
Me-C-CO2H
     CM
     CRN
         79-10-7
     CMF C3. H4 O2
HO-C-CH-CH2
```

3

CRN 52624-57-4

CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

CDES 8:GD, ETHER

CM 4

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 5

CRN .9003-11-6

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CM 6

CRN 75-56-9 CMF C3 H6 O



CM 7

CRN 75-21-8 CMF C2 H4 O



RN 67184-01-4 USPATFULL

CN 2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CRN 52624-57-4

CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x

CDES 8:GD, ETHER

CM 3

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 4

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CM 5

CRN 75-56-9 CMF C3 H6 O



CM 6

CRN 75-21-8 CMF C2 H4 O



=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 08:53:31 ON 12 DEC 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available

for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Dec 2006 VOL 145 ISS 25 FILE LAST UPDATED: 11 Dec 2006 (20061211/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> => d 172 bib abs hitstr retable tot

```
L72 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
```

AN 2004:857643 HCAPLUS

DN 141:350865

- TI Mixtures of polyalkoxylated trimethylolpropane (meth)acrylates for crosslinked hydrogel manufacturing.
- IN Popp, Andreas; Daniel, Thomas; Schroeder,
 Juergen; Jaworek, Thomas; Funk, Ruediger;
 Schwalm, Reinhold; Weismantel, Matthias; Riegel,
 Ulrich
- PA BASF Aktiengesellschaft, Germany
- SO PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DT Patent

LA German FAN.CNT 8

PATENT NO. KIND DATE APPLICATION NO. DATE -----____ _____ ------PT WO 2004087790 Α2 20041014 WO 2004-EP3551 20040402 WO 2004087790 ΑЗ 20041216 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG WO 2003104300 Α1 20031218 WO 2003-EP305953 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2520719 AA20041014 CA 2004-2520719

```
EP 1613685
                          Α2
                                 20060111
                                             EP 2004-725321
                                                                     20040402
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
     BR 2004009007
                          Α.
                                 20060328
                                             BR 2004-9007
     JP 2006524275
                          T2
                                 20061026
                                             JP 2006-504980
                                                                     20040402
     US 2006212011
                          A1
                                 20060921
                                             US 2005-551630
                                                                     20051104
PRAI DE 2003-10315345
                          Α
                                 20030403
     DE 2003-10315669
                          Α
                                 20030404
    WO 2003-EP5953
                          Α
                                 20030606
     DE 2002-10225943
                          Α
                                 20020611
                                           <--
     WO 2003-EP305953
                          Α
                                 20030606
                          W
     WO 2004-EP3551
                                 20040402
OS
    MARPAT 141:350865
GΙ
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A mixture of ≥2 polyalkoxylated trimethylolpropane (meth)acrylates I, II, III (AO1, AO2 and AO3 = EO, PO or/and BO, EO = OCH2CH2, PO = OCH2CHCH3 or OCH(CH3)CH2, BO = OCH2CHEt or OCH(Et)CH2, p1 + p2 + p3 = 28 - 75, n1 + p2 + p3 = 28 - 75 $n^2 + n^3 = 28 - 60$, $m^1 + m^2 + m^3 = 4 - 13$, R^1 , R^2 and $R^3 = H$ or CH^3) prepared by reacting a mixture of alkoxylated trimethylolpropanes with (meth)acrylic acid in the presence of ≥ 1 esterification catalyst and ≥ 1

polymerization inhibitor is used as crosslinking agent for manufacture of a swellable

crosslinked hydrogel (superabsorbing polymer), as raw material for paints, as additives to cement and for polymer dispersion and polyacrylates manufacture Hydrogel manufacture comprises steps of (a) radical polymerization of an ester

with (meth)acrylic acid optionally in the presence of monoethylenically unsatd. compds., hydrophilic monomers (such as sodium acrylate) and radical initiators, (b) drying and (c) milling of the resulting mixture This, mixing 1427 weight parts of ethoxylated and propoxylated trimethylolpropane, 216 weight parts of acrylic acid, 5 weight parts of H2SO4

345 weight parts of methylcyclohexane, adding 3 weight parts of hydroquinone monomethyl ether, 1 weight part of triphenylphosphite, 1 weight part of hypophosphoric acid gave (after removing an azeotropic water) a polymer having viscosity 330 mPa s, used as a crosslinking agent for acrylic acid and sodium acrylate for swellable hydrogel manufacturing 824950-59-6P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked hydrogel; mixture of polyalkoxylated trimethylolpropane (meth)acrylates for swellable crosslinked hydrogel (superabsorbing polymer) manufacture)

RN 824950-59-6 HCAPLUS

CN 2-Propenoic acid, polymer with methyloxirane diblock polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

in

IT

CRN 7446-81-3 CMF C3 H4 O2 . Na

Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 824950-31-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN 697765-47-2

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CRN 75-56-9 CMF C3 H6 O



CM 8

CRN 75-21-8 CMF C2 H4 O

/°\

IT 824950-31-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(polyalkoxylated trimethylolpropane (meth)acrylates; mixture of polyalkoxylated trimethylolpropane (meth)acrylates for swellable crosslinked hydrogel (superabsorbing polymer) manufacture)

RN 824950-31-4 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, diblock (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

```
CRN
          697765-47-2
     CMF
          (C3 H6 O . C2 H4 O) x
     CCI
          PMS
          CM
               75-56-9
          CRN
          CMF
              C3 H6 O
     СНЗ
          CM
               5
          CRN
               75-21-8
          CMF
              C2 H4 O
    ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2004:857543 HCAPLUS
     141:350828
DN
ΤI
     Mixtures of at least two (meth) acrylates having at least two double bonds
     for manufacture of hydrogels
ΙN
     Riegel, Ulrich; Daniel, Thomas; Hermeling, Dieter;
     Elliott, Mark; Schwalm, Reinhold
PΑ
     BASF Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 84 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     German
FAN.CNT 8
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
     -----
                        ____
                                _____
                                            ______
ΡI
     WO 2004087635
                         A2
                                20041014
                                           WO 2004-EP3348
                                                                   20040330
     WO 2004087635
                         Α3
                                20041216
            AE, AG, AL, AM, AT, AU, AZ; BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     WO 2003104300
                         Α1
                               20031218
                                         WO 2003-EP305953
                                                                  20030606 <--
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
```

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,

```
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     WO 2003104301
                           A1
                                 20031218
                                             WO 2003-EP306028
                                                                     20030610
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB,
                         GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF,
                          CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     WO 2003104302
                           A1
                                 20031218
                                             WO 2003-EP306054
                                                                     20030610
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF,
                         CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     DE 10358372
                          A1
                                 20041014
                                             DE 2003-10358372
                                                                     20031211
     EP 1613583
                                             EP 2004-724254
                          A2
                                 20060111
                                                                     20040330
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, ⋅CZ, EE, HU, PL, SK
     BR 2004008969
                          Α
                                 20060404
                                             BR 2004-8969
                                                                     20040330
     JP 2006522047
                          Т2
                                 20060928
                                             JP 2006-504915
                                                                     20040330
     US 2006235141
                          A1
                                 20061019
                                             US 2005-551605
                                                                     20050930
PRAI DE 2003-10315336
                          Α
                                 20030403
     DE 2003-10315345
                          Α
                                 20030403
     DE 2003-10315669
                          Α
                                 20030404
     DE. 2003-10319462
                          Α
                                 20030429
     WO 2003-EP5953
                          A
                                 20030606
     WO 2003-EP6028
                          Α
                                 20030610
     WO 2003-EP6054
                          Α
                                 20030610
     DE 2003-10358372
                          Α
                                 20031211
     DE 2002-10225943
                          Α
                                 20020611
     WO 2004-EP3348
                          W
                                 20040330
OS
     MARPAT 141:350828
AΒ
     Title mixts. for use as crosslinkers in the manufacture of superabsorbent
     hydrogels with high hydrolysis resistance and particle formation during
     manufacture have GFV 200-600 g/mol double bonds, with GFV = \Sigma ni=1 =
     \alpha iMWi/Zi [\Sigma ni=1\alpha i=1, \alpha i=mol fraction of compound
     (i) in the mixture, n [number of compds. in mixture] \geq 2, Zi = number of
     double bonds in compound (i), MWi = mol. weight of compound (i)]. A typical
     hydrogel was manufactured by radical polymerization of 220 g acrylic acid,
2201 g
     37.3% aqueous Na acrylate solution, and 5.1 g mixture containing 69.3% 30:5
ethylene
     oxide-propylene oxide copolymer trimethylolpropane ether triacrylate and
     30.7% Laromer TPGDA.
IT
     117989-76-1P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
```

(crosslinker; mixts. of at least two (meth)acrylates having at least
 two double bonds for crosslinkers for manufacture of hydrogels)
RN 117989-76-1 HCAPLUS
CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2 (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



774577-49-0P, Acrylic acid-ethylene oxide-propylene oxide copolymer trimethylolpropane ether triacrylate-sodium acrylate copolymer RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (mixts. of at least two (meth)acrylates having at least two double bonds for crosslinkers for manufacture of hydrogels)

RN 774577-49-0 HCAPLUS

2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 7446-81-3 CMF C3 H4 O2 . Na

Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 117989-76-1 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6

CMF C6 H14 O3

CM6

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

> 7 CM

CRN 75-56-9 CMF C3 H6 O



CM 8

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

2004:20133 HCAPLUS ΑN

DN 140:102019

ΤI Photosensitive polymer compositions with good plating resistance and strippability and photosensitive elements containing them

ΙN Sawabe, Masaru; Ishimaru, Toshiaki

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

Japanese

KIND	DATE	APPLICATION NO.	DATE
A2	20040108	JP 2003-78279	20030320 <
		JP 2002-18913	19930215 <
B2	20030818	01 2002 10313	13330213 (
=		<	•
	A2 B2 A2	A2 20040108 B2 20060712 A2 20021115 B2 20030818 A3 19930215	A2 20040108 JP 2003-78279 B2 20060712 A2 20021115 JP 2002-18913 B2 20030818 A3 19930215 <

jan delaval - 12 december 2006

The compns., useful as plating resists for printed circuit boards, contain ethylenically unsatd. compds. having ≥ 3 unsatd. groups CH2:CR1CO(OR2)m(OR3)nO (R1 = H, Me; R2, R3 = ethylene, propylene; R2 \neq R3; m, n \geq 1). The photosensitive elements have the photosensitive polymer composition layers on support films. IT 117989-76-1 161278-82-6

RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive polymer compns. containing ethoxy- and propoxy-containing unsatd. compds. with good strippability for plating resists)

RN 117989-76-1 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM. 2

CRN 77-99-6 CMF C6 H14 O3

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CRN 75-21-8 CMF C2 H4 O



RN 161278-82-6 HCAPLUS
CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2(hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate) (9CI)
(CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 2

CRN 77-99-6 CMF C6 H14 O3

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8

CMF C2 H4 O



```
ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
L72
AN
     2003:991565 HCAPLUS
DN
     140:43143
ΤI
     Acrylic esters of alkoxylated trimethylolpropane useful in production of
     hydrogels
ΙN
     Popp, Andreas; Daniel, Thomas; Schroeder,
     Juergen; Jaworek, Thomas; Funk, Ruediger;
     Schwalm, Reinhold; Weismantel, Matthias; Riegel,
    Ulrich
PΑ
    BASF Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 65 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    German
FAN.CNT 8
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     ------
                         ____
                                -----
    WO 2003104302
PΙ
                          A1
                                20031218
                                            WO 2003-EP6054
                                                                    20030610 <--
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    DE 10225943
                          A1
                                20040108
                                            DE 2002-10225943
                                                                    20020611 <--
    CA 2487031
                          AA
                                20031218
                                            CA 2003-2487031
                                                                    20030610 <--
    AU 2003238490
                          A1
                                20031222
                                            AU 2003-238490
                                                                    20030610 <--
    BR 2003011501
                          Α
                                20050222
                                            BR 2003-11501
                                                                    20030610 <--
    EP 1516009
                          Α1
                                20050323
                                            EP 2003-732556
                                                                    20030610 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    CN 1659211
                                20050824
                                            CN 2003-813615
                                                                    20030610 <--
                          Α
    JP 2005532432
                          T2
                                20051027
                                            JP 2004-511368
                                                                    20030610 <--
                                           DE 2003-10358372
    DE 10358372
                                20041014
                                                                    20031211
                          Α1
    WO 2004087635
                          A2
                                20041014
                                            WO 2004-EP3348
                                                                    20040330
    WO 2004087635
                          А3
                                20041216
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
    EP 1613583
                         Α2
                                20060111
                                          EP 2004-724254 20040330
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
```

AΒ Acrylic and/or methacrylic esters of alkoxylated trimethylolpropane have the general formula (I), where EO is -OCH2CH2-, PO independently represents -OCH2CH(CH3) - or -OCH(CH3)CH2-; n1, n2, n3 are independently 4, 5 or 6; the total of n1, n2 and n3 equals to 14, 15 or 16; m1, m2, m3 are independently 1, 2 or 3; the total of m1, m2 and m3 equals to 4, 5 or 6; and R1, R2 and R3 are independently H or CH3. The esters can be used as crosslinking agents in production of hydrogels, or as components in cement additive compns. or in production of polymer dispersions and lacquers. Thus, an alkoxylated trimethylolpropane was produced by reacting trimethylolpropane (77) in water in the presence of KOH (0.5) with propylene oxide (167) at 120-130°, followed by adding and reacting with ethylene oxide (379 g) at 145-155°. The alkoxylated trimethylolpropane (887) was mixed with acrylic acid (216) and esterified in the presence of H2SO4 (5 parts) and polymerization inhibitors. The obtained alkoxylated trimethylolpropane triacrylate was used as a crosslinking agent in radical polymerization with acrylic acid and sodium acrylate.

IT 150604-34-5P

RL: IMF (Industrial manufacture); PREP (Preparation) (acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 150604-34-5 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} & \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



IT 633314-15-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-15-5 HCAPLUS

CN 2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3 CMF C3 H4 O2 . Na

· 🗨 Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 77-99-6 CMF C6 H14 O3

CM 6

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times CCI PMS

CM 7

CRN 75-56-9 CMF C3 H6 O

CH3

CM 8

CRN 75-21-8 · CMF C2 H4 O

 $^{\circ}$

IT 633314-14-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-14-4 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

O || || HO- C- CH == CH₂

CM 2

CRN 77-99-6 CMF C6 H14 O3

 $\begin{array}{c} \text{CH}_2-\text{OH} \\ \mid \\ \text{HO-CH}_2-\text{C-Et} \\ \mid \\ \text{CH}_2-\text{OH} \end{array}$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9

CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL)	(RPG)	eferenced Work (RWK)	Referenced File
Basf Corp Christensen, S Gartner, H Kushi, K	2001 2001 1996 1994	WO WO US	0156625 A 0145758 A 5506324 A 5356754 A	HCAPLUS HCAPLUS HCAPLUS HCAPLUS

L72 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:991563 HCAPLUS

DN 140:28395

TI Acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels

IN Popp, Andreas; Daniel, Thomas; Schroeder,
 Juergen; Jaworek, Thomas; Funk, Ruediger;
 Schwalm, Reinhold; Weismantel, Matthias; Riegel,
 Ulrich

PA BASF Aktiengesellschaft, Germany

SO PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN. CNT 8

PAN.	NT	8																	
	PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT:	ION	NO.		D	ATE		
							-												
ΡI	WO	2003	1043	00		A1		2003	1218	•	WO 2	003-	EP59	53		20	0030	606 <	
		W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
								DK,											
			GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN.	MW.	MX.	MZ.	NI.	NO.	NZ.	OM.	

```
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR,
        TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
        KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
        FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
DE 10225943
                     Α1
                            20040108
                                        DE 2002-10225943
                                                                20020611 <--
CA 2488226
                     AA
                            20031218
                                        CA 2003-2488226
                                                                20030606 <--
AU 2003238476
                     A1
                            20031222
                                        AU 2003-238476
                                                                20030606 <--
BR 2003011489
                     Α
                            20050315
                                        BR 2003-11489
                                                                20030606 <--
EP 1516008
                     A1
                            20050323
                                        EP 2003-732542
                                                                20030606 <--
        AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
CN 1675286
                     Α
                            20050928
                                        CN 2003-818837
                                                               20030606 <--
JP 2005532430
                     T2
                            20051027
                                        JP 2004-511366
                                                                20030606 <--
DE 10358372
                     A1
                            20041014
                                        DE 2003-10358372
                                                                20031211
WO 2004087635
                     A2
                            20041014
                                        WO 2004-EP3348
                                                                20040330
WO 2004087635
                     A3
                            20041216
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
        CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
        GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
        LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
        NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
        TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
    RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
        BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
        ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
        SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
EP 1613583
                     Α2
                           20060111
                                       EP 2004-724254
                                                               20040330
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
BR 2004008969
                     A
                           20060404
                                        BR 2004-8969
                                                               20040330
CN 1768028
                           20060503
                                        CN 2004-80009205
                                                               20040330
JP 2006522047
                     T2
                           20060928
                                        JP 2006-504915
                                                               20040330
CA 2520719
                     AΑ
                           20041014
                                        CA 2004-2520719
                                                               20040402
WO 2004087790
                     A2
                           20041014
                                        WO 2004-EP3551
                                                               20040402
WO 2004087790
                     A3
                           20041216
       AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
        CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
        GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
        LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
        NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
        TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
    RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
        BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
        ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
        SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
        TD, TG
EP 1613685
                     A2
                           20060111
                                       EP 2004-725321
                                                               20040402
       AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
BR 2004009007
                     Α
                           20060328
                                       BR 2004-9007
                                                               20040402
CN 1771278
                     Α
                           20060510
                                       CN 2004-80009299
                                                               20040402
JP 2006524275
                     T2
                           20061026
                                        JP 2006-504980
                                                               20040402
CA 2527362
                     AA
                           20041216
                                       CA 2004-2527362
                                                               20040604
WO 2004108795
                     A1
                           20041216
                                       WO 2004-EP6033
                                                               20040604
       AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
        CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
        GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
        LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
```

```
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
              EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
              SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
     EP 1636291
                                  20060322
                           Α1
                                              EP 2004-736051
                                                                       20040604
         R: AT, BE, CH,
                          DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, FI,
                          RO, CY, TR, BG, CZ, EE, HU, PL, SK
     BR 2004010899
                           Α
                                  20060704
                                              BR 2004-10899
                                                                       20040604
     CN 1802402
                           Α
                                  20060712
                                              CN 2004-80015769
                                                                       20040604
     JP 2006527179
                           T2
                                  20061130
                                              JP 2006-508273
                                                                       20040604
     US 2005215752
                           A1
                                  20050929
                                              US 2004-517042
                                                                       20041203 <--
     US 2006235141
                           A1
                                  20061019
                                              US 2005-551605
                                                                       20050930
     US 2006212011
                           A1
                                  20060921
                                              US 2005-551630
                                                                       20051104
     US 2006247377
                           A1
                                  20061102
                                              US 2005-558996
                                                                       20051201
PRAI DE 2002-10225943
                           Α.
                                  20020611
                                            <--
     DE 2003-10315345
                           Α
                                  20030403
     DE 2003-10315669
                           Α
                                  20030404
     DE 2003-10315336
                           Α1
                                  20030403
     DE 2003-10319462
                           Α1
                                  20030429
     WO 2003-EP305953
                           Α
                                  20030606
     WO 2003-EP5953
                           W
                                  20030606
     WO 2003-EP6028
                           Α
                                  20030610
     WO 2003-EP6054
                           Α
                                  20030610
     DE 2003-10358369
                           Α
                                  20031211
     DE 2003-10358372
                           Α
                                  20031211
     WO 2004-EP3348
                           W
                                  20040330
     WO 2004-EP3551
                           W
                                  20040402
     WO 2004-EP6033
                           W
                                  20040604
GI
```

$$\begin{array}{c} \text{CH}_2 \\ \text{R}_3 \\ \text{CH}_2 \\ \text{R}_3 \\ \text{CH}_2 \\ \text{C}_{\text{AO}} \\ \text{P}_1 \\ \text{C}_{\text{R}_2} \\ \text{CH}_2 \\ \text{C}_{\text{R}_2} \\ \text{C}_{\text{R}_2} \\ \text{C}_{\text{H}_2} \\ \text{I} \\ \end{array}$$

AB Acrylic and/or methacrylic esters of alkoxylated trimethylolpropane have the general formula (I), where each AO independently represents EO, PO or BO, EO being -OCH2CH2-, PO being -OCH2CH(CH3)- or -OCH(CH3)CH2-, BO being -OCH2CH(CH2CH3)- or -OCH(CH2CH3)CH2-; the total of p1, p2 and p3 equals to an integer from 28 to 75; and R1, R2 and R3 are independently H or CH3. The esters can be used as crosslinking agents in production of hydrogels, or as components in cement additive compns. or in production of polymer dispersions and lacquers. Thus, an alkoxylated trimethylolpropane was produced by reacting trimethylolpropane (77) in water in the presence of KOH (0.5) with ethylene oxide (759) at 145-155°, followed by adding and reacting with propylene oxide (167 g) at 120-130°. The

alkoxylated trimethylolpropane (1,427) was mixed with acrylic acid (216) and esterified in the presence of H2SO4 $(5\ parts)$ and polymerization inhibitors.

The obtained alkoxylated trimethylolpropane triacrylate was used as a crosslinking agent in radical polymerization with acrylic acid and sodium acrylate.

IT 150604-34-5P

RL: IMF (Industrial manufacture); PREP (Preparation)
 (acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 150604-34-5 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5 CMF (C3 H6 O . C2

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O

/^\

IT 633314-15-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

figurogers)

RN 633314-15-5 HCAPLUS CN 2-Propenoic acid, pol

2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tri-2-propenoate, and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3 CMF C3 H4 O2 . Na

Na

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 633314-14-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . 3 C3 H4 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 6

CRN. 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CM 7

CRN 75-56-9 CMF C3 H6 O



CM 8

CRN 75-21-8 CMF C2 H4 O



CN

IT 633314-14-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(acrylic esters of alkoxylated trimethylolpropane useful in production of hydrogels)

RN 633314-14-4 HCAPLUS

Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

CM 3

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



RETABLE

Referenced Author	Year VOL	(RPG)	ferenced Work	Referenced
(RAU)	(RPY) (RVL)		(RWK)	File
Abraham, B	1968	US 3	3380831 A	
Basf Ag	1988		0264841 A	HCAPLUS
Dai Ichi Kogyo Seiyaku	1999	EP (0923147 A	HCAPLUS

Gartner, H	1996	1	1	US	5506324	A	HCAPLUS
Hartmann, H	1997	1	1	US	5661220	Α	HCAPLUS
Kushi, K	1994	1	1	US	5356754	Α	HCAPLUS
Matsushita Electric	Ind 1997	1	1	EP	0777287	A	HCAPLUS
Ritter, W	1997	ļ	1	US	5648518	A	HCAPLUS

L72 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:418045 HCAPLUS

DN 133:65978

TI Photosensitive resin composition, photosensitive element using same, resist pattern formation, and production of printed circuit board

IN Ichikawa, Tatsuya; Ohashi, Takeshi

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000171971 PRAI JP 1998-345349 GI	A2	20000623	JP 1998-345349 <	19981204 <

$$H_2C = CCO(OX)_{pO}$$
 CH_3
 CH_3

AΒ The title resin composition contains (a) a CO2H-containing binder polymer, (b) photopolymg. compds. having ≥1 polymerizable ethylenic unsatd. bond in their mols. including compds. MeCH2[CH2CH2O(AO)m1(BO)n1COCR1:CH2][CCH2O (AO) m2 (BO) n2COCR2:CH2] [CH2CH2O (AO) m3 (BO) n3COCR 3:CH2] [R1-3 = H or Me; A, B = C2-6 alkylene (A \neq B); m1 + m2 + m3 = 6-45; n1 + n2 + n3 = 3-45] and I [R4, R5 = H or Me; X, Y = C2-6 alkylene; Z1, Z2 = halo, H, C1-20alkyl, C3-10 cycloalkyl, amino- or C1-20 alkyl-substituted aryl, amino, SH, C1-10 alkylmercapto, C1-10 alkyl-containing carboxyalkyl, C1-20 alkoxy, heterocycle-containing group; p + q = 8-40; s, t = 1-4] as essential components, and (c) a photopolymn. initiator. The photosensitive element comprises a support laminated with the composition and an optional protective film and is laminated on a substrate for forming a circuit while the protective film is being peeled off, if necessary, imagewise exposed to activating ray to photo-cure the exposed areas, and developed to remove the unexposed areas to form a resist pattern. The substrate on which a resist pattern has been formed by the above process is subjected to etching or plating to give a printed circuit board. The composition shows high photosensitivity and provides high resolution resist patterns with high plating resistance, adhesivity, mech. strength, and flexibility.

IT 117989-76-1

RL: TEM (Technical or engineered material use); USES (Uses) (O 565; photoresist composition containing polymer with carboxy group, acrylate

compound, and photopolymn. initiator)

RN 117989-76-1 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-

(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN AN 2000:127557 HCAPLUS

DATE

19980813 <--

```
DN
     132:152313
ΤI
     Extraction procedure for the production of pure esters of
     \alpha, \beta-ethylenically unsaturated carboxylic acids
ΙN
     Paulus, Wolfgang; Bernhard, Ludwig; Johansson, Astrid Carina; Haas,
     Guenter; Geisendoerfer, Matthias; Beck, Erich; Leube, Hartmann; Kuse,
     Reinhold; Jaeger, Ulrich
PΑ
     BASF A.-G., Germany
SO
     Ger. Offen., 10 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
     -----
                          ____
                                 _____
     DE 19836788
                          A1
                                 20000224
                                             DE 1998-19836788
     DE 19836788
                          B4
                                 20060928
PRAI DE 1998-19836788
                                 19980813 <--
     A procedure for the production of pure, water-insol. esters of
     \alpha,\beta\text{-ethylenically unsatd.} carboxylic acids (e.g., acrylic acid
     esters of ethoxylated propoxylated trimethylolpropane) from its mixts.
     which are contaminated with unconverted carboxylic acid(s) and/or acid
     group-containing catalysts comprises: (A) conducting a liquid-liquid
extraction against
     an aqueous phase containing the esters using a base; and (B) the aqueous base
with the
     impurities contained in it are phase separated
     117989-76-1P
```

RL: PUR (Purification or recovery); PREP (Preparation) (extraction procedure for the production of pure esters of ethylenically unsatd.

carboxylic acids)

RN 117989-76-1 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX. NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

2 CM

CRN 77-99-6 CMF C6 H14 O3

$$CH_2-OH$$
 $HO-CH_2-C-Et$
 CH_2-OH

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9

CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL) (RPG)	Referenced Work (RWK)	Referenced File ·
	=+======	=+====	•	•
Anon		1	EP 0618187 A1	HCAPLUS
Anon	1	1	JP 62106052 A	HCAPLUS
Anon		1	JP 62106056 A	HCAPLUS
Anon		i .	JP 62106057 A	HCAPLUS
Anon		1	JP 63174951 A	HCAPLUS
Anon		1	JP 63275544 A	HCAPLUS
Ullmann	1985 A1	168	Encyclopedia of Ind	u

L72 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:322528 HCAPLUS

DN 131:37785

TI Photosensitive resin composition and photosensitive element using same

IN Ichikawa, Tatsuya; Endo, Masaki

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE.	APPLICATION NO.	DATE
PI	JP 11133595	A2	19990521	JP 1997-294510	19971027 <
PRAI	JP 1997-294510		19971027	<	

AB The title resin composition comprises (a) a CO2H-containing binder polymer,

photopolymn. initiator, and (c) photopolymg. unsatd. compds. having

 ≥ 1 polymerizable ethylenic unsatd. bond in their mol. including 5-70 weight% of compound EtC[CH2O(AO)m1(BO)n1COCR1:CH2][CH2O(AO)m2(BO)n2COCR2:CH2][CH2O(AO)m3(BO)n3COCR3:CH2] (R1- 3 = H or Me; A, B = CHMeCH2, CH2CHMe, CH2CH2, A \neq B; m1 + m2 + m3 = 6-45; n1 + n2 + n3 = 3-45). The photosensitive element comprises a support coated with the composition The composition useful as a resist suited for use in production of printed circuit boards shows improved plating resistance and peeling properties. 117989-76-1

RL: TEM (Technical or engineered material use); USES (Uses) (photoresist containing binder polymer with carboxyl group, photopolymn. initiator, and ethylenic unsaturate photopolymerizable compound) 117989-76-1 HCAPLUS

RN 117989-76-1 HCAPLUS
CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

ΙT

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



75-21-8 CRN CMF C2 H4 O



```
L72 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
    1997:479241 HCAPLUS
DN
     127:97521
    Flat non-aqueous electrolyte secondary battery with polymer coated anode
ΤI
ΙN
    Matsui, Tooru; Takeyama, Kenichi
PΑ
    Matsushita Electric Industrial Co., Ltd., Japan
SO
     Eur. Pat. Appl., 13 pp.
     CODEN: EPXXDW
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                              DATE
     ______
                        ____
                               -----
PΙ
    EP 777287
                        A2
                               19970604 EP 1996-117858
                                                                 19961107 <--
    EP 777287
                        A3
                               19970716
    EP 777287
                        В1
                               20000202
        R: BE, DE, FR, GB, IT
    JP 09147920
                     A2
                               19970606
                                          JP 1995-309381
                                                                 19951128 <--
    JP 3394125
                         B2
                               20030407
    US 5773166
                        Α
                               19980630
                                          US 1996-756778
                                                                 19961126 <--
PRAI JP 1995-309381
                        Α
                               19951128 <--
    The flat non-aqueous electrolyte secondary battery has an anode containing an
     alkali metal (e.g., lithium) active material, where the anode is coated
    with a polymer film containing dissociated alkali metal ions, supporting a gel
     electrolyte. The polymer film is made of a polymeric monomer which has
    mol. weight/terminal polymer functional group number of \leq 500, and a
    alkoxylated polyol acrylate structure where the alkoxylated chains are
     formed by random or block polymerization of ethylene oxide and/or propylene
    oxide.
IΤ
    117989-76-1
     RL: DEV (Device component use); TEM (Technical or engineered material
     use); USES (Uses)
        (flat non-aqueous electrolyte secondary alkali metal battery with polymer
       coated anode)
RN
```

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM1

CRN 79-10-7 CMF C3 H4 O2

117989-76-1 HCAPLUS

0 HO-C-CH=CH2

CRN 77-99-6 CMF C6 H14 O3

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:369593 HCAPLUS

DN 126:344211

TI Continuous process for the preparation of highly stable, finely divided, low viscosity polymer polyols of small average particle size

IN Kratz, Mark R.; Dietrich, Manfred; Heinemann, Torsten; Jacobs, Gundolf; Sanders, Josef; Woynar, Helmut

PA Bayer A.-G., Germany

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

```
PΙ
     EP 768324
                           A1
                                 19970416
                                              EP 1995-115940
                                                                      19951010 <--
     EP 768324
                           В1
                                 20000816
         R: BE, DE, ES, FR, GB, IT, NL
     ES 2148397
                           Т3
                                 20001016
                                              ES 1995-115940
                                                                      19951010 <--
     US 5814699
                           Α
                                 19980929
                                              US 1996-723659
                                                                      19961003 <--
     CA 2187125
                           AA
                                 19970411
                                              CA 1996-2187125
                                                                      19961004 <--
     JP 09124750
                           A2
                                 19970513
                                              JP 1996-285938
                                                                      19961009 <--
     BR 9605032
                           Α
                                 19980630
                                              BR 1996-5032
                                                                      19961009 <--
     CN 1160061
                           Α
                                 19970924
                                              CN 1996-112759
                                                                      19961010 <--
     CN 1069654
                           В
                                 20010815
PRAI EP 1995-115940
                           Α
                                 19951010
                                           <--
OS
     MARPAT 126:344211
```

AB Highly stable, finely divided, low viscosity polymer polyols of small average particle size, useful for preparation of polyurethane foams, are manufacture by 1st

reacting (1) a mixture of styrene and acrylonitrile (I) in a mixture of (2) a polyoxyalkylene polyether polyol and (3) a macromer in the presence of (4) a free radical initiator, (5) a solvent having moderate chain transfer activity and optionally (6) a reaction moderator at a temperature of ≥100° to give a seed with macromer content ≥12% with

respect to the polyol mixture and the solids content 15-30%, and then using the seed in further stirred-tank reactors for a similar polymerization of styrene

with I but optionally in the presence of a macromer. A typical macromer was manufactured by reaction of ethylene oxide-propylene oxide copolymer trimethylolpropane ether with maleic anhydride and subsequently with ethylene oxide.

118800-30-9P TΤ

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(macromer; continuous manufacture of highly stable, finely divided, low viscosity polymer polyols of small average particle size from macromers for polyurethane foams)

118800-30-9 HCAPLUS RN

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

CM 1

79-10-7 CRN CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:580576 HCAPLUS

DN 125:302320

TI Low viscosity polymer polyols, a process for their production, and manufacture of polyurethane from materials

IN Sanders, Josef; Kratz, Mark; Dietrich, Manfred; Heinemann, Torsten;
Woynar, Helmut; Jacobs, Gundolf; Scholz, Uwe

PA Bayer Aktiengesellschaft, Germany

SO U.S., 10 pp.

CODEN: USXXAM

DT Patent

LA English

FAN CNT 2

FAN.CNT Z				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5554662	Α	19960910	US 1995-470695	19950606 <
PRAI DE 1995-19508578	Α	19950310	<	
OS MARPAT 125:302320				
GI				

AB Stable, agglomerate-free, low viscosity graft copolymer dispersions are produced by radical polymerization of ethylenically unsatd. monomers in the presence of a base polyol, a macromer, an enol ether chain-transfer agent A=CHOR (A is I; R is a C1-18 aliphatic hydrocarbon radical, a C5-10 cycloaliph. hydrocarbon radical, or a (substituted) benzyl radical; R' is H or a C1-8 aliphatic hydrocarbon radical), and optionally, an organic solvent. Acrylonitrile and styrene were polymerized with ethylene trimethylolpropane-initiated oxide-propylene oxide copolymer acrylate macromer in the presence of cyclohex-3-enylidene-cyclohexyl ether to give a graft copolymer which was used in manufacture of a polyurethane foam.

IT '118800-30-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(low viscosity polymer polyols, a process for their production, and $\mbox{\tt manufacture}$

of polyurethane from materials)

RN 118800-30-9 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

. CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



```
L72 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
```

AN 1995:235144 HCAPLUS

DN 122:147331

TI Photosensitive resin composition and photosensitive element

IN Sawabe, Masaru; Ishimaru, Toshiaki

PA Hitachi Chemical Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODÉN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	JP 06242603	A2	19940902	JP 1993-25691	19930215 <		
	JP 2002328469	. A2	20021115	JP 2002-18913	19930215 <		
	JP 3437179	В2	20030818	•	•		
PRAI	JP 1993-25691	A.3	19930215	<			

AB The composition comprises (1) an ethylenic unsatd. compound having ≥ 3 unsatd. groups O(R3O)n(R2O)nCOCR1:CH2 (R1 = H, Me; R2-3 = ethylene, propylene, R2 \neq R3; m, n ≥ 1), (2) an organic halo compound, (3) a film-forming polymer, and (4) photopolymn. initiator that generates radicals by irradiation Photosensitive elements comprising substrates and the photosensitive composition layer are claimed. The composition shows good flexibility, releasing property, and plating resistance, and prevents generation of scum.

IT 117989-76-1 161278-82-6

RL: TEM (Technical or engineered material use); USES (Uses) (photoresist containing propoxy ethoxy acrylate and organic halo compound)

RN 117989-76-1 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



RN 161278-82-6 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CRN 77-99-6 CMF C6 H14 O3

CM3

CRN 9003-11-6 ${\tt CMF}$ (C3 H6 O . C2 H4 O) xCCI PMS

> CM4

CRN 75-56-9 CMF СЗ Н6 О



CM5

CRN 75-21**-**8 CMF C2 H4 O



L72 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:227405 HCAPLUS

DN 122:92840

ΤI Crosslinking curable resin composition

IN Kushi, Kenji; Inukai, Kenichi; Iseki, Takayuki; Koyanagi, Seiya

PΑ Mitsubishi Rayon Co., Ltd., Japan

SO U.S., 13 pp.

CODEN: USXXAM

DΤ Patent

LA English

```
FAN.CNT 1
```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 5356754	Α	19941018	US 1992-950500	19920925 <
PRAI	US 1992-950500		19920925	<	

AB A photopolymerizable or radiation polymerizable alkaline developing crosslinking curable resin composition comprises: (a) 5-30 parts by weight of

at

least one compound possessing in one mol. on the average 1.5 or more (meth)acryloyloxy groups, which is obtained by reacting (meth)acrylic acid with a reaction product formed by adding, to a polyat. alc. possessing 3 or more OH groups in one mol., an alkylene oxide containing propylene oxide in an amount of 67% molar or greater in an amount of 5-12 mol per mol of OH group in the aforementioned polyat. alc., (b) 5-30 parts by weight of at least one crosslinkable monomer other than that stated above in (a) , possessing in one mol. 2 or more ethylenically unsatd. groups, (c) 45-75 parts by weight of a thermoplastic polymer for use as a binder, the thermoplastic polymer in turn being formed of 15-35 weight% of at least one α , β -unsatd. carboxyl group containing a monomer having 3-15 carbon atoms, and 65-85 weight

ક્ર

of another copolymerizable monomer, and (d) 0-10 parts by weight of a photopolymn. initiator. The composition possesses superior antiplating properties and a short stripping period, in which the stripped plate is not easily dissolved in the stripping fluid.

IT 118800-30-9P

RL: POF (Polymer in formulation); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(crosslinking curable resin composition)

RN 118800-30-9 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$CH_2-OH$$
 $HO-CH_2-C-Et$
 CH_2-OH

CM 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS CM 4 CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



```
L72 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
     1994:334936 HCAPLUS
DN
     120:334936
TΙ
     Novel (meth)acrylate for photoresists
     Myazaki, Seiji; Myoshi, Takanori; Sonobe, Hiroshi; Koyanagi, Seiya
ΙN
PΑ
     Mitsubishi Rayon Co, Japan
SO
     Jpn. Kokai Tokkyo Koho, 5 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     -----
                         ____
PΤ
     JP 05125015
                         Α2
                                19930521
                                            JP 1991-289960
                                                                   19911106 <--
PRAI JP 1991-289960
                                19911106 <--
    The claimed acrylate is obtained by forming an adduct of alkylene oxides
     to a polyhydric alc., then esterifying; the polyhydric alc. containing
     \geq3 OH in 1 mol., the alkylene oxide being propylene oxide or its
     mixture with ethylene oxide (propylene oxide \geq67 mol%), the addition
     amount of alkylene oxides to polyhydric alc. being average 5-12 mol/mol(OH),
and
     there existing average ≥1.5 (meth)acrylate ester group in 1 mol..
    (meth)acrylate shows superior plating-resistance, easy peeling off
    property and low irritation to skin.
ΙT
     118800-30-9P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and use of, as photoresist composition)
RN
     118800-30-9 HCAPLUS
CN
     Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
     (hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)
    CM
          1
```

CRN 79-10-7 CMF C3 H4 O2

2 CM

77-99-6 CRN CMF C6 H14 O3

3 CM

9003-11-6 CRN CMF (C3 H6 O . C2 H4 O)x CCI

PMS

CM4

CRN 75-56-9 CMF С3 Н6 О

СНЗ

CM5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ΑN 1993:683964 HCAPLUS

DN 119:283964

TΙ Solid electrolytes and their preparation

ΙN Kono, Michiyuki; Motogami, Kenji; Mori, Shigeo

PA Daiichi Kogyo Seiyaku Co., Ltd., Japan

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW DΤ Patent LA English FAN.CNT 1 DATE PATENT NO. KIND APPLICATION NO. DATE -------**-**_____ -----PΙ EP 537930 Α1 19930421 EP 1992-309063 19921005 <--EP 537930 В1 19950524 R: DE, FR, GB, NL JP 1991-296173 JP 05109311 Α2 19930430 19911015 <--JP 2987474 В2 19991206 US 5356553 Α 19941018 US 1992-957258 19921006 <--CA 2080047 AA 19930416 CA 1992-2080047 19921007 <--CA 2080047 С 19990302 PRAI JP 1991-296173 Α 19911015 <--GΙ

O R"

—
$$(CH_2CH_2O)_m$$
— $(CH_2CHR'O)_n$ — C — C = CH_2

AB The title electrolytes are prepared by dissolving a solvent and an electrolyte salt in a trifunctional terminal acryloyl-modified alkylene oxide polymer containing a polymer chain described by the general formula I (R' = a low mol. weight alkyl group; R'' = H or Me; m, or n = 0 or an integer ≥ 1 ; and m + n ≥ 35) and crosslinking it. The electrolytes are ion conductors and applications in cells, electrochromic displays, and sensors are indicated.

IT 115165-81-6P 118800-30-9P

RL: PREP (Preparation)

(preparation of, for electrolytes)

RN 115165-81-6 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 77-99-6 CMF C6 H14 O3

CH3

CM 5

CRN 75-21-8

CMF C2 H4 O

CMF C3 H6 O

 $\stackrel{\circ}{\triangle}$

RN 118800-30-9 HCAPLUS
CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2(hydroxymethyl)-1,3-propanediol (3:1), 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

O || HO-C-CH==CH₂

CM 2

CRN 77-99-6 CMF C6 H14 O3

CMF C3 H4 O2

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CRN 9003-11-6

 CMF (C3 H6 O . C2 H4 O) x

CCI PMS

> CM 4

CRN 75-56-9 CMF C3 H6 O



5 CM

CRN 75-21**-**8 CMF C2 H4 O



L72 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN AN 1993:675100 HCAPLUS

DN 119:275100

ΤI Batteries with solid polymer electrolytes

IN Kono, Michiyuki; Mori, Shigeo; Takeda, Kazunari; Izuti, Shyuiti

Daiichi Kogyo Seiyaku Co., Ltd., Japan; Yuasa Corp. PΑ

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

 DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 9314529 W: CA, US	A1	19930722	WO 1993-JP64	19930120 <
	RW: AT, BE, C JP 05198303 EP 576686 EP 576686	H, DE, DK A2 A1 B1	, ES, FR, 19930806 19940105 20011010	GB, GR, IE, IT, LU, MC, JP 1992-31451 EP 1993-902505	NL, PT, SE 19920121 < 19930120 <
	R: DE, FR, G JP 07006787 JP 3290229	B A2 B2	19950110 20020610	JP 1993-26269	19930120 <

CA 2106205 С 19991214 CA 1993-2106205 19930120 <--US 5436090 Α 19950725 US 1993-119214 19930921 <--PRAI .JP 1992-31451 · A 19920121 <--WO 1993-JP64 W 19930120 <--

AB The batteries use electrolytes obtained by crosslinking a mixture containing a trifunctional group polymer, an electrolyte salt, and a solvent by energy beam irradiation and/or heating; where the polymer contains 3 functional polymer chains of (CH2CH2O)m(CH2CRHO)nCOCR1:CH2 (R = C1-6 alkyl group, R1 = H or Me, m + n ≥35, and m or n may be 0), and the solvent is used at 220-950% the weight of the polymer. The batteries may use the electrolyte as separators and cathodes containing the electrolyte, or use anodes containing the electrolyte.

IT 150604-34-5

RL: USES (Uses)

(crosslinked, electrolyte containing lithium salts and solvents and, for batteries)

RN 150604-34-5 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tris(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O) \times

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O СНЗ

CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:451269 HCAPLUS

DN 119:51269

TI Prevention of discoloration of unfixed dyes by combustion exhaust gases in dyeing or printing fabrics with reactive dyes

IN Takekoshi, Shoji; Hashimoto, Akira; Tao, Kazuo

PA Meisei Chemical Works, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

LAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04333676	A2	19921120	JP 1991-135446	19910510 <
PRAI	JP 2549583 JP 1991-135446	В2	19961030 19910510	<	

AB In the title process, cellulosic fabrics are dyed or printed with compns. containing CH2:CRCO2(CH2CH2O)s(CH2CHMeO)pCOCR:CH2 (R = Me, H; s = 5-20; p = 0-10), CH2:CRCO2CH2CH(OH)CH2O(CH2CH2O)s(CH2CHMeO)pCH2CH(OH)CH2CO2CR:CH2, MeCH2C(CH2OX)3 [X = (CH2CH2O)s(CH2CHMeO)pCOCR:CH2], and/or YOCH2C(CH2OX)3 [Y = CH2:CRCO(CH2CH2O)s(CH2CHMeO)p]. A designed cotton broadcloth was dyed with a liquid containing polyoxyethylene dimethacrylate and Remazole Orange

3R, dried, contacted with nitrogen oxide (g), and heat treated to give a colored fabric without discoloration.

IT 117989-76-1

RL: USES (Uses)

(reactive dyeing solns. for cellulosic fabrics., for discoloration prevention)

RN 117989-76-1 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2- (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:410401 HCAPLUS

DN 119:10401

TI Resist printing cellulosic fabrics with reactive dyes for sharp patterns

IN Takekoshi, Shoji; Hashimoto, Akira; Tao, Kazuo

PA Meisei Chemical Works, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

```
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                         ____
                                -----
                                            ______
                                                                   _____
PΙ
     JP 04343773
                         Α2
                                19921130
                                            JP 1991-141093 ·
                                                                   19910515 <--
     JP 2652475
                         В2
                                19970910
PRAI JP 1991-141093
                                19910515
                                         <--
     In the title process, cellulosic fabrics are printed with compns. containing
     sulfurous acid salts, acidic sulfurous acid salts, and/or
    hydroxyalkanesulfonic acid salts as dye resist agents and subsequently
     printed with compns. containing reactive dyes containing vinyl sulfone groups,
and
     polyoxyalkylene (meth)acrylates with a specified structure as hollowing
    preventive agents. A cotton broadcloth was printed with a composition
containing
     Cibacron Red B and 3.0% Na2SO3, subsequently printed with a composition
containing
     Sumifix Brilliant Blue R and 2.0% polyoxyethylene diacrylate, and heat
     treated 8 min at 100^{\circ} to give a resist-printed fabric with a sharp
     pattern.
IT
     117989-76-1
     RL: USES (Uses)
        (resist printing compns. containing, for cotton fabrics, for sharp
        patterns)
RN
     117989-76-1 HCAPLUS
CN
    Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-
     (hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX
    NAME)
    CM
         1
    CRN 79-10-7
    CMF C3 H4 O2
   0
HO-C-CH=CH2
         2
    CM
    CRN
         77-99-6
    CMF C6 H14 O3
        СН2-ОН
HO-CH_2-C-Et
```

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CH2-OH

3

CM

CRN 75-56-9 CMF C3 H6 O



CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1989:10884 HCAPLUS

DN 110:10884

TI Copolymers from hydrophobic (meth)acrylic acid esters and hydrophilic monomers, method of their preparation, and application as petroleum emulsion breaker

IN Barthold, Klaus; Baur, Richard; Crema, Stefano Carlo; Lasowski, Juergen; Oppenlaender, Knut; Heide, Wilfried

PA BASF A.-G., Fed. Rep. Ger.

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

IAN.CNI Z					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 3635489	A1	19880421	DE 1986-3635489	19861018 <
	NO 8704319	A	19880419	NO 1987-4319	19871016 <
	NO 171682	В	19930111		
	NO 171682	С	19930421		
	EP 264841	A2	19880427	EP 1987-115126	19871016 <
	EP 264841	A3	19890712		
	EP 264841	В1	19921230		
	R: DE, FR, GB	, IT, NL			
	CA 1309552	A1	19921027	CA 1987-549642	19871019 <
	US 5472617	A	19951205	US 1993-175935	19931227 <
PRAI	DE 1986-3635489	Α	19861018	<	
	US 1992-905130	B2	19920624	<	

AB The copolymers useful as petroleum emulsion breakers are prepared from hydrophobic (meth)acrylic acid esters, their alc. components derived from a mixture of polyglycols and polyglycol ethers, with hydrophilic, ethylenic unsatd. monomers, whereby in copolymers (i) all or substantially all free OH-groups are etherified, esterified, or converted into urethane groups and/or (ii) by esterification the acid is neutralized by amine addition Thus, 893 g acrylic acid ester with ethoxylated-propoxylated trimethylolpropane and 95.8 g acrylic acid, in the presence of 453 mg 2,2'-azobisisobutyronitrile and 460 g xylene, were copolymd. at 80°

for 3 h to obtain a polymer (K-value 13.2, measured as 1% xylene solution), which was then treated with 14.3 g acetic anhydride at 100° for 3 h for end group protection and neutralized with 7.7 g tributylamine for catalytic acid to yield a final product having 23.8 K-value and <1 OH-number IT 115165-81-6D, polymers with (meth)acrylates 117801-95-3 RL: USES (Uses) (petroleum emulsion breaker) RN 115165-81-6 HCAPLUS CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME) CM1 CRN 79-41-4 CMF C4 H6 O2 CH₂ $Me-C-CO_2H$ CM2 CRN 77-99-6 CMF C6 H14 O3 сн2-он ${\tt HO-CH_2-C-Et}$ ${\rm CH_2}-{\rm OH}$ CM3 CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O) x CCI PMS CM4 75-56**-**9 CRN CMF СЗ Н6 О



CM 5

CRN 75-21-8

CMF C2 H4 O

/^\

RN 117801-95-3 HCAPLUS CN 2-Propenoic acid, po

2-Propenoic acid, polymer with methyloxirane block polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 117742-99-1 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x . x C3 H4 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

CM 4

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 5

CRN 106392-12-5 CMF (C3 H6 O . C2 H4 O) x CCI PMS CM 6

75-56-9 CRN CMF C3 H6 O



CM7

CRN 75-21-8 CMF C2 H4 O



```
L72 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
    1989:9783 HCAPLUS
```

DN 110:9783

TΙ Acrylate-amine adducts for radiation-curable compositions

Weiss, Wolfram; Beck, Erich; Jacobi, Manfred; Richter, Peter IN

PA BASF A.-G., Fed. Rep. Ger.

SO Ger. Offen., 6 pp.

CODEN: GWXXBX

DTPatent

LA German

FAN.CNT 1

	PATENT NO.	KIŅD	DATE	APPLICATION NO.	DATE
					
ΡI	DE 3706355	A1	19880908	DE 1987-3706355	19870227 <
	JP 63227553	A2	19880921	JP 1988-35424	19880219 <
	EP 280222	A2	19880831	EP 1988-102525	19880220 <
	EP 280222	A3	19900704		

R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE

PRAI DE 1987-3706355 Α 19870227 <--

Addition products of a primary monoamine and an ester of (meth)acrylic acid and a polyhydric alc. (0.05-0.4 mol NH2/mol double bonds) have good storage stability, cure quickly and completely during irradiation in air, and are useful in coatings and printing inks. Ethanolamine 61, tripropylene glycol diacrylate 840, and BHT 0.9 g were heated at 60° to give a clear, colorless product having viscosity 130 mPa-s (at 23°) before and after 6 wk of storage at 60° in the dark. A mixture of the product 100, Ph2CO 2, and benzil di-Me ketal 1 g was coated (100 $\mu m)$ on glass and cured in UV light.

ΙT 117989-76-1DP, addition products with primary amines RL: PREP (Preparation)

(preparation of storage-stable, photocurable)

RN 117989-76-1 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1 CRN 79-10-7 CMF C3 H4 O2

CM ' 2

CRN 77-99-6 CMF C6 H14 O3

CM - 3

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 4

CRN 75-56-9 CMF C3 H6 O

CH3

CM 5

CRN 75-21-8 CMF C2 H4 O



L72 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1979:7044 HCAPLUS

DN 90:7044

TI Stable suspensions of inorganic filler in organic polyhydroxyl compounds

IN Von Bonin, Wulf

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 44 pp.

CODEN: GWXXBX

DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 2714291	A1	19781005	DE 1977-2714291	19770331 <
	US 4207227	A	19800610	US 1977-856075	19771130 <
	SE 7713638	A	19780604	SE 1977-13638	19771201 <
	FR 2372851	Al	19780630	FR 1977-36404	19771202 <
	GB 1583457	A	19810128	GB 1977-50304	19771202 <
	JP 53071189	A2	19780624	JP 1977-144639	19771203 <
	ES 464700	A1	19781101	ES 1977-464700	19771205 <
PRAI	DE 1976-2654746	A	19761203	<	
	DE 1977-2714291	A	19770331	<	

The title compns., useful in polyurethane prepns., contain 0.5-80% inorg. filler and 99.5-20% (cyclo)aliphatic polyol grafted with 0.01-35% unsatd. carboxylic acid and 0-25% comonomer (polyol CO2H content 0.005-15%). Thus, stirring polyethylene-polypropylene glycol trimethylolpropane ether (3:1) (I) (mol. weight 4800, primary OH content <3%) 200, styrene 10, acrylic acid 20, and tert-Bu peroxyoctanoate 0.5 part 4 h at 90° gave a clear, viscous graft polymer (II) [67184-04-7]. A suspension of 80 parts CaCO3 (average particle size 3 μ) in 400 parts I and 52 parts II showed 0.5% settling in 15 days at 21°, compared with 65% in the absence of II.

IT 67183-99-7 67184-01-4

RL: USES (Uses)

(graft, dispersing agents, for suspensions of inorg. fillers in polyols)

RN 67183-99-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 52624-57-4
CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

CM 4

CRN 77-99-6
CMF C6 H14 O3

CH2-OH
HO-CH2-C-Et

CH₂—OH

CM 5

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 6

CRN 75-56-9

СНЗ

CM 7

CRN 75-21-8

CMF C2 H4 O

CMF C3 H6 O

 $^{\circ}$

RN 67184-01-4 HCAPLUS
CN 2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 4

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 5

CH2-OH

CRN 75-56-9 CMF C3 H6 O

СНЗ

CM 6

CRN 75-21-8

CMF C2 H4 O



L72 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:511127 HCAPLUS
DN 89:111127
TI Stable suspensions of inorganic fillers in organic polyhydroxyl compounds
IN Von Bonin, Wulf

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 32 pp.

CODEN: GWXXBX

DT Patent LA German FAN.CNT 2

•	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 2654746	A1	19780608	DE 1976-2654746	19761203 <
	US 4207227	Α	19800610	US 1977-856075	19771130 <
	SE 7713638	Α	19780604	SE 1977-13638	19771201 <
	BE 861425	A1	19780602	BE 1977-183104	19771202 <
	FR 2372851	A1	19780630	FR 1977-36404	19771202 <
	GB 1583457	Α	19810128	GB 1977-50304	19771202 <
	JP 53071189	A2	19780624	JP 1977-144639	19771203 <
	ES 464700	A1	19781101	ES 1977-464700	19771205 <
PRAİ	DE 1976-2654746	A	19761203	·<	
	DE 1977-2714291	Α	19770331	<	

AB Polyols grafted with (meth)acrylic acid and, in some cases, other vinyl monomers were used to stabilize suspensions of inorg. fillers in polyols. These suspensions were useful for the manufacture of polyurethanes. Thus, a polyol (I) (mol. weight 4800) prepared from (HOCH2)3CEt, ethylene oxide, and propylene oxide was grafted (200 parts) with 10 parts styrene and 20 parts acrylic acid, and 52 parts graft copolymer was mixed with 400 parts I and 80 parts CaCO3 filler to prepared a stable suspension.

IT 67183-99-7 67184-01-4

RL: USES (Uses)

(graft, for stabilization of polyol-filler suspensions for polyurethane manufacture)

RN 67183-99-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 52624-57-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

> CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM 5

CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) x CCI PMS

CM 6

CRN 75-56-9 CMF C3 H6 O

СНЗ

CM 7.

CRN 75-21-8 CMF C2 H4 O

 $^{\circ}$

RN 67184-01-4 HCAPLUS

CN 2-Propenoic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

O || HO- C- CH == CH₂ CM 2

CRN 52624-57-4 CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

> 3 CM

CRN 77-99-6 CMF C6 H14 O3

$$\begin{array}{c} \text{CH}_2-\text{OH} \\ | \\ \text{HO-CH}_2-\text{C-Et} \\ | \\ \text{CH}_2-\text{OH} \end{array}$$

CM

CRN 9003-11-6

 CMF (C3 H6 O . C2 H4 O)x CCI

PMS

CM

CRN 75-56-9 CMF C3 H6 O



CM

CRN 75-21-8 CMF C2 H4 O



=> d his

(FILE 'HOME' ENTERED AT 07:41:06 ON 12 DEC 2006) SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:41:25 ON 12 DEC 2006 L17 S US20060020078/PN OR (US2004-516698# OR WO2003-EP6054 OR DE200 SEL RN

```
FILE 'REGISTRY' ENTERED AT 07:43:08 ON 12 DEC 2006
L2
        75 S E1-E75
L3
             28 S L2 NOT PMS/CI
L4
            1 S L3 AND C6H14O3
L5
             1 S L3 AND C3H4O2
L6
             1 S L3 AND C4H6O2
            47 S L2 NOT L3
L7
            12 S L7 AND 1/NC
L8
            35 S L7 NOT L8
L9
L1.0
            16 S L9 AND 77-99-6/CRN
L11
            16 S L10 AND C2H4O
            16 S L11 AND C3H6O
L12
L13
            4 S L12 AND 4/NC
            12 S L12 NOT L13
L14
             SEL RN 4 9 11
L15
             3 S E76-E78
L16
            7 S L13,L15
L17
              STR
           50 S L17
L18
L19
              STR
L20
             0 S L19
L21
               STR L19
             50 S L21
L22<sup>.</sup>
L23
         36063 S L21 FUL
               SAV TEMP L23 NUTTER516/A
L24
           50 S L17 SAM SUB=L23
         15641 S L17 FUL SUB=L23
               SAV TEMP L25 NUTTER516A/A
L26
           497 S L25 AND (75-21-8 OR 25322-68-3)/CRN
L27
           2695 S L25 AND C2H4O
L28
          2198 S L27 NOT L26
L29
           437 S L25 AND (75-56-9 OR 25322-69-4)/CRN
L30
           1208 S L25 AND C3H6O
L31
           771 S L30 NOT L29
L32
           430 S L26-L28 AND L29-L31
           195 S L32 NOT (P OR SI OR N OR S)/ELS
L33
L34.
           114 S L33 NOT C6/ES
L35
           107 S L34 NOT L16
L36
            50 S L35 AND (77-99-6 OR 79-41-4)/CRN
L37
            34 S L35 AND 77-99-6/CRN
L38
            28 S L37 AND (79-41-4 OR 79-10-7)/CRN
L39
           24 S L38 NOT (OC4 OR OC4-C6)/ES.
              SEL RN 1 2 10-12 14 17 10 22 24
            9 S E79-E87
L40
            15 S L39 AND C6H14O3 NOT L40
               SEL RN 12
L42
            1 S E88
L43
            10 S L37 AND C6H14O3 NOT L39
L44
            16 S L36 NOT L37-L43
L45
            57 S L35 NOT L36-L44
L46
            323 S L32 NOT L35-L45
L47
            51 S L46 NOT (C6 OR OC4 OR OC5 OR OC4-C6 OR C6-C6 OR C5-C5)/ES
            47 S L47 NOT 56-81-5/CRN
L48
L49
            40 S L48 AND (N OR S OR P OR SI)/ELS
· L50
            7 S L48 NOT L49
L51
             6 S L50 NOT 28961-43-5/CRN
L52
           410 S L25 AND 107-21-1/CRN
L53
           3059 S L52, L26-L28
L54
           454 S L53 AND L29-L31
L55
            99 S L53 AND 57-55-6/CRN
```

```
L56
              0 S L53 AND C3H8O2 NOT L55
L57
            538 S L54, L55
L58
            108 S L57 NOT L32-L51
L59
             22 S L58 AND UNSPECIFIED
L60
             86 S L58 NOT L59
L61
             16 S L60 NOT (C6 OR OC4 OR OC4-C6 OR C6-C6 OR C5-C5)/ES
L62
             6 S L16 NOT 28961-43-5/CRN
L63
             16 S L62, L40, L42, L51
                SAV L63 TEMP NUTTER516B/A
     FILE 'HCAOLD' ENTERED AT 08:47:00 ON 12 DEC 2006
L64
              0 S L63
     FILE 'USPATFULL' ENTERED AT 08:47:04 ON 12 DEC 2006
L65
             15 S L63
L66
             11 S L65 AND (PD<=20020611 OR PRD<=20020611 OR AD<=20020611)
     FILE 'USPATFULL' ENTERED AT 08:49:41 ON 12 DEC 2006
     FILE 'HCAPLUS' ENTERED AT 08:49:48 ON 12 DEC 2006
L67
             23 S L63
L68
             22 S L67 AND (PD<=20020611 OR PRD<=20020611 OR AD<=20020611) AND P
L69
              0 S L67 AND PY<=2002 NOT P/DT
L70
              7 S L68 AND BASF?/PA,CS
L71
              4 S L68 AND (POPP ? OR DANIEL ? OR SCHRODER ? OR SCHROEDER ? OR J
L72.
             22 S L68-L71
     FILE 'REGISTRY' ENTERED AT 08:52:43 ON 12 DEC 2006
     FILE 'USPATFULL' ENTERED AT 08:53:04 ON 12 DEC 2006
     FILE 'HCAPLUS' ENTERED AT 08:53:31 ON 12 DEC 2006
```

=>